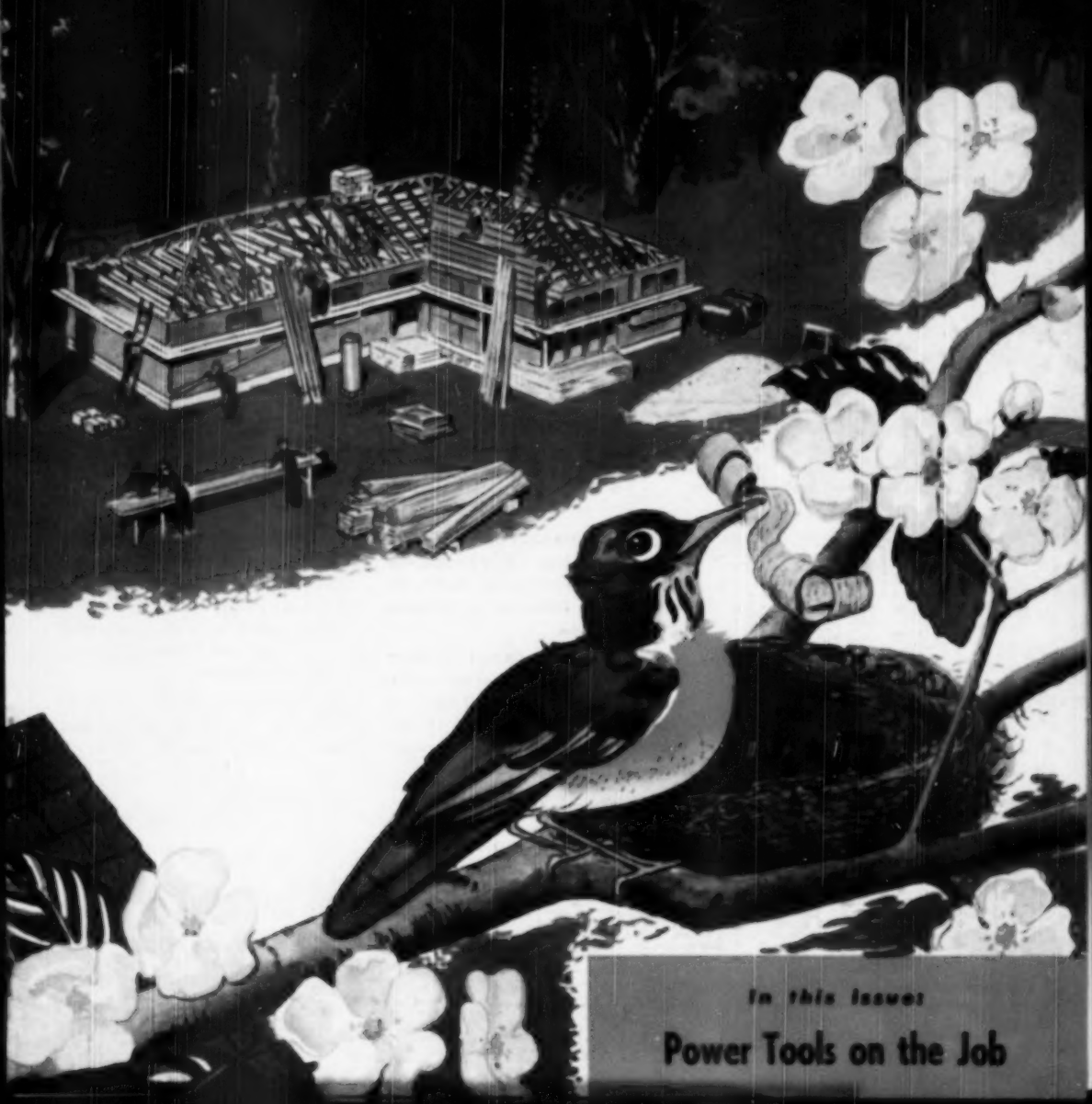
AMERICAN BUILDER

MAY 1950
PRICE 50 CENTS

THE WORLD'S GREATEST BUILDING PAPER



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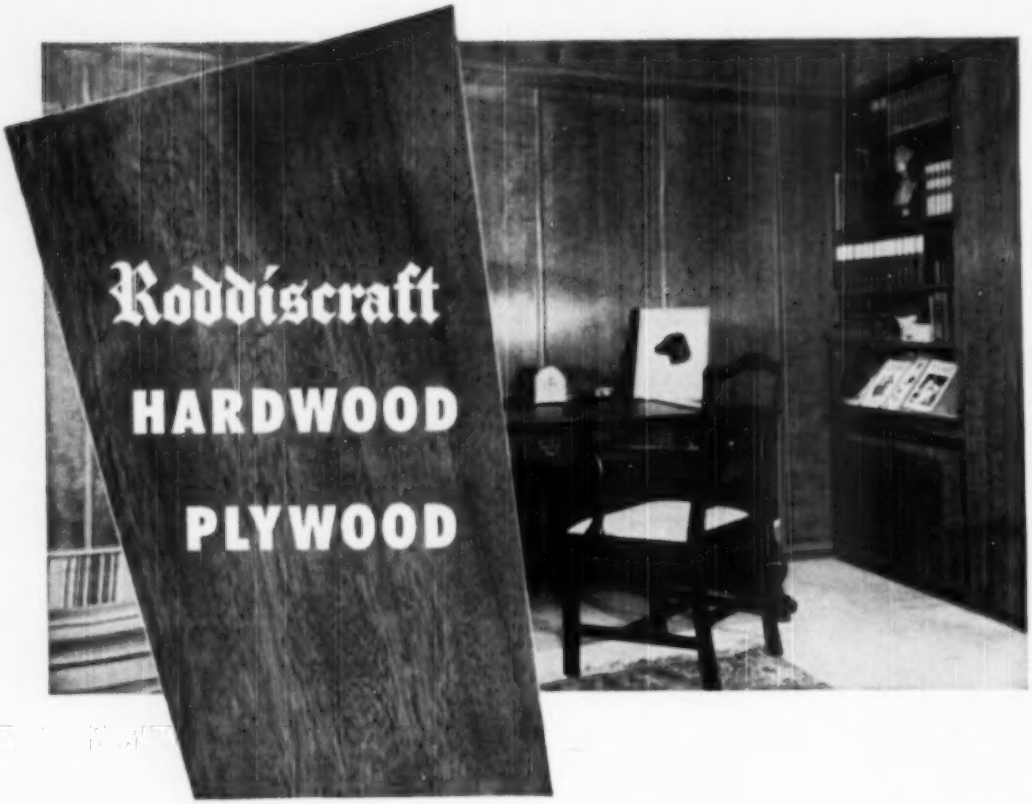
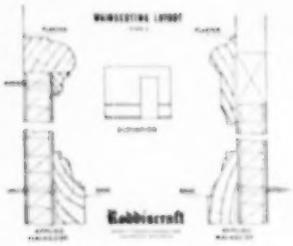
Power Tools on the Job



WANTED in 252,000 Rooms



Large detail drawings of this item and other wainscoting layouts showing approved installation methods are available on request. Write for wainscoting layout charts Nos. 10-15.

In the residence units estimated to be built in 1950 there will be a minimum of 252,000 wood paneled rooms, according to a recent survey of home builders' plans.

Roddiscraft—producer of the best in hardwood plywoods—can furnish all your plywood needs. All standard domestic and foreign hardwoods are carried in stock in Roddiscraft's coast-to-coast chain of warehouses.

Many unusual types of hardwoods are available on special order from Roddiscraft. Tell your Roddiscraft representative you want to see the Roddiscraft Sample Book, showing actual samples of fifty-one different types of face veneers.

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San Antonio, Texas . 727 N. Cherry St.

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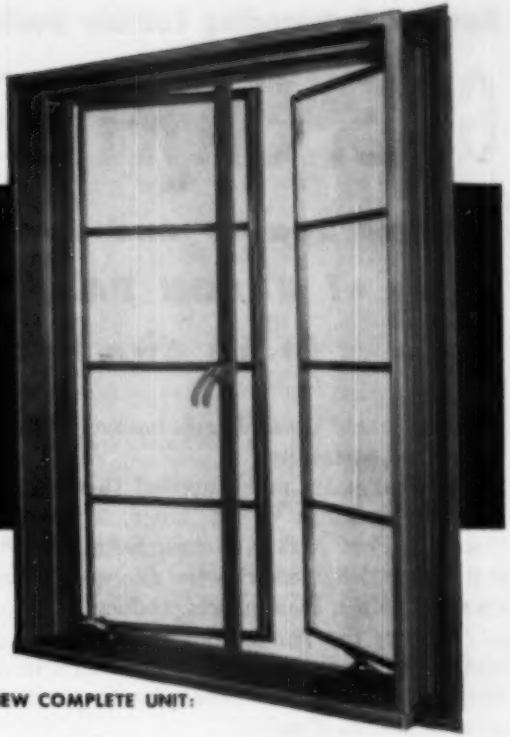
No trimming...it's already completely trimmed inside and outside



ALL YOU DO:

FENESTRA'S NEW COMPLETE UNIT:

One man can easily install this new, completely trimmed unit in a few minutes . . . **using only hammer and nails.**

Your carpenter prepares all openings alike for frame or brick veneer. Runs sheathing right over stud and cripple and saws it off flush. Plaster or dry wall butts against metal trim inside. Shingles, siding, stucco or brick butt against it outside. ***No finished work required inside or out.***

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Neat and modern, simple to clean and screen from inside the room, always easy to open, Fenestra Windows will add real sales appeal to your homes.

And since the trim is galvanized and Bonderized, with a baked-on coat of prime-paint—you have a strong sales point in low maintenance. Head and jamb members are 18 gage, sill 16 gage for extra strength.

Check on these new units right away. For types and sizes call your nearest Fenestra salesman (listed in your Yellow Telephone Directory) today—he's an experienced representative of America's oldest and largest Steel Window Manufacturer. Or mail coupon.

Fenestra

WINDOWS • DOORS • PANELS

DETROIT STEEL PRODUCTS COMPANY
Dept. AB-5, 2260 E. Grand Blvd., Detroit 11, Mich.

Please send me complete information on the complete, new Fenestra Unit—Steel Casement with Combination Inside-Outside Metal Trim.

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Company _____

Address _____

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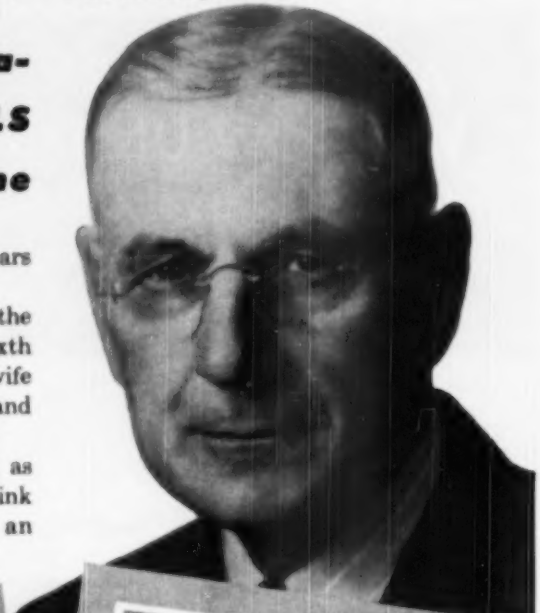
Another Outstanding Lumber Dealer

G. E. CARTER

owner, Builder's Lumber Co., Port Arthur, Texas

tells of beauty and durability of UPSON PANELS in his own home



"I have sold Upson Panels for over 25 years to satisfied customers.

"Several years ago I applied them to the walls and ceilings of my home, 2114 Sixth Street in Port Arthur, Texas. Both my wife and I were delighted with the rich quality and character which these panels produce.

"Today, the panels look just as good as when they were first applied. I don't think they will ever need repairing, beyond an occasional coat of paint."

Upson full-wall Strong-Bilt Panels beauty—give added value to hundreds of thousands of America's homes. Above is a view of Mr. Carter's living room.

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UPSON PANELS

Carpenters: There are jobs waiting for men skilled in the application of Upson Panels. Lumber Dealers everywhere endorse this product—use it in their own homes.

mail this coupon today ▶

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I am interested in knowing more about ☐ Upson Strong-Bilt Panels for new construction ☐ Upson Kover-Krak Panels for re-covering cracked ceilings. Send me your booklet "New Interiors For Old" and Instruction Sheets.

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TYPE OF BUSINESS_____

STREET_____

CITY _____ STATE _____

BUILDER

IN THE JUNE ISSUE

A report on cement and its uses in the light construction industry. Portland cement is a vital structural part of every permanent building. In the June issue, *American Builder* will explore specific uses of cement, concrete, and concrete products. On-the-job stories and technical information will provide helpful building aids.

READ . . .

How aggregate sizes and gradings affect the economic and structural aspects of concrete.

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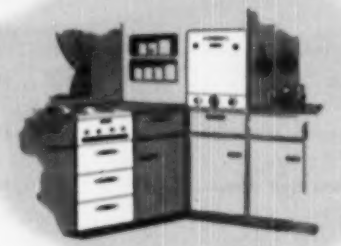
6 REASONS WHY your kitchens "sell" more UNIVERSAL

DRAMATIC! NEW!

Here's a different kind of range to

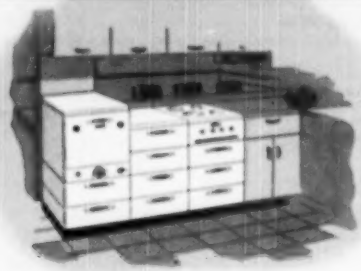
1

"CONVENIENCE-LEVEL" cooking! Here's the one feature women want most in a range . . . everything at the *"Convenience-Level."* Now you can give your buyer a range with the oven or cooking units at any desired height. *"Convenience-Level"* cooking eliminates stooping and bending. It's unique and only Universal Select-a-Range has *it*. It's something every woman wants!



2

LARGER WORK AREAS! Space-saving Select-a-Range design lets you build the oven in a wall or install it in a cabinet. Makes more counter area available for much needed extra work space where space is at a premium. It's the ideal solution for small home kitchens, providing greater design flexibility and freedom. It's something every woman wants!



3

MORE STORAGE SPACE! Exclusive Select-a-Range design provides up to *three* times more storage drawer capacity than a conventional range in the same floor area. Extra drawers in matching design are right at the range where every woman wants them for *all* her utensils, cutlery and housewares. Saves steps . . . saves work. It's something every woman wants!

QUALITY AND VALUE SINCE 1842

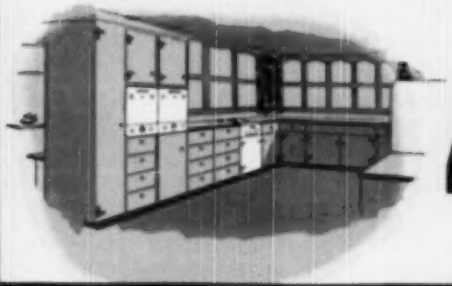
Centennial Anniversary Presentation

houses when you install the revolutionary

Select-a-Range

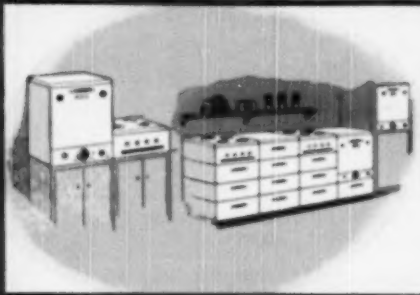
EXCLUSIVE!

pack more sales appeal in kitchens!



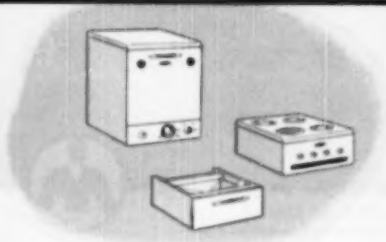
4

GREATER BEAUTY AND EYE APPEAL! Select-a-Range gives your kitchens that "modern as tomorrow" look at low cost. Built-in or peninsular arrangements now widely publicized in national magazines have extra appeal that sells the whole kitchen easier. Here's something new and different for your kitchens. It's something every woman wants!



5

NEW VERSATILITY for houses of every price range! There's a Select-a-Range for every house plan . . . low cost economy arrangements . . . as well as many other larger variations for higher-priced and "custom-built" houses. And every Select-a-Range has all the most advanced features of electric, automatic cooking. It's something every woman wants!



6

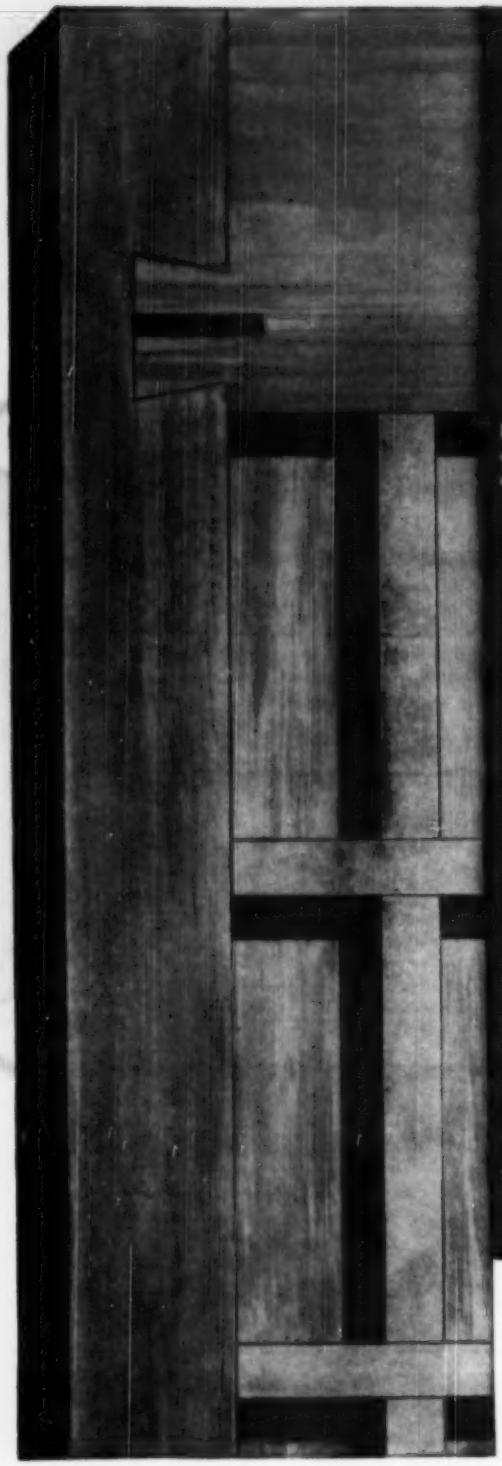
COMPLETE FLEXIBILITY! 3 basic units give you over 25 Select-a-Range variations to provide the widest possible choice of range designs. And Select-a-Range flexibility gives you new freedom to design your kitchens as you want them . . . impossible to attain with the rigid dimensions of conventional ranges. Here's more sales power for you at low cost!

From every point of view—

THE UNIVERSAL SELECT-A-RANGE PUTS MORE SALES APPEAL IN KITCHENS . . . AND IT'S THE MOST WIDELY PUBLICIZED AND ADVERTISED RANGE IN AMERICA TODAY!

UNIVERSAL

LANDERS, FRARY & CLARK, NEW BRITAIN, CONN.



MORE *for your money, in* MENGEL *Hollow-Core Flush* DOORS!

Installation and finishing expense leads most builders to demand the extra beauty, durability, economy and *sales appeal* of Mengel Hollow-Core Flush Doors.

1. *Balanced* seven-ply construction to provide controlled reaction in changing weather conditions.
2. Hardwood construction throughout — stronger, more durable, free from grain-raising, more easily and economically finished.
3. Exclusive Insulok grid core material has inherent resiliency, cannot cause warping, nor transfer grid pattern to faces.
4. Greater strength. Adequate core stock surface area provides maximum gluing surface and resistance to warpage.
5. Precision key-locked dove-tailed joinings of stiles and rails add strength and stability.
6. Ready to finish. Door faces are smoothly belt-sanded. Stiles are machine-planed at factory — prefit to standard book sizes.
7. Fully guaranteed. Each door must meet rigid quality control standards and constant inspection throughout manufacture.
8. Mengel Hardwood Flush Doors are economical — no mouldings to paint — no corners to collect dirt. Smooth hardwood surfaces are less absorbent and less costly to finish — easier to clean and longer-lived.

Write for complete specifications. Use the convenient coupon.

Also see —
MENGEL STABILIZED SOLID-CORE DOORS
the finest products of their type on the market

The Mengel Co., Plywood Division
2508 South Fourth Street, Louisville, Ky.

Gentlemen: Please send me, without obligation, full specifications on _____ Mengel Hollow-Core Flush Doors; _____ Mengel Stabilized Solid-Core Doors.

Name _____

Street _____

City _____ State _____

Publisher's Page

Am I My Brother's Keeper?

THE Hearst papers' business columnist, M. S. Rukeyser, not long ago observed that "the modern corporation has become a cooperative social institution," not interested exclusively in making a dollar, if possible, for the stockholders, but also seeking to contribute something to community welfare. He quoted an economist for the Standard Oil Co. (N.J.) who upheld the same theme, namely that the interests of the owners of business cannot be advanced, in the long run, unless due account is taken of business' responsibility for the welfare of the whole community.

Along the same general line, several years ago, the General Motors Corporation employed a social scientist to report to it on how well it was carrying out its obligation to be a good citizen and a good neighbor. That is, in looking after the interest of its stockholders, was the company at the same time adding to or subtracting from the welfare of everybody else?

Several manufacturers have shown sufficient sense of stewardship for the kind of political and economic system which has made America great to be willing to devote some of the advertising space which they purchase, not just to advancing the sale of their products, but also to educational information in defense of the American political and economic system. A specific example of this endeavor was afforded in the February issue of *American Builder*, in the advertisement of the Ceco Steel Products Corporation.

One of the most noteworthy instances of this sense of stewardship for the general welfare by an individual corporation occurred recently in a public statement by a vice-president of the Westinghouse Electric Corporation, in which he defended the country's system of privately operated railroads; and set forth a program to remove some of the political handicaps which bedevil this industry and confront it with the threat of socialization. Coming from a railroad executive, such a statement would probably have been discounted as self-serving propaganda. Coming as it did from a great corporation with no immediate interest at stake, the expression could not fail to carry a great deal more conviction.

All of which raises the question—when those of us who oppose socialism in principle are carrying on educational efforts in support of our beliefs, are we not more effective when we complain against socializing the "other fellow," than when we limit our objections to the socialistic invasion of our own business? We establish a system of police protection to defend our neighbors against robbery, knowing that the system will also protect us if we are attacked. This is surely a more effective method of defense than one in which each citizen would be expected to defend himself against thieves, getting no help from his neighbors. If this mutual-aid system is applicable to protection against theft, why not to protection against socialization—which is simply robbery under a politer name?

Some of our states are designated as "commonwealths"—a term which can be easily misinterpreted to suggest the ownership of all wealth in common. What this word really means, though, is "common welfare." That is, the "commonwealth" concerns itself with those things, and only those things, in which *everybody* has an interest—such as discouraging crime or repelling a foreign invader. It is to my advantage that theft and murder be punished—not just when they are practiced against me, but when my neighbor is the victim, because unless these crimes are put down, nobody's property or life, including my own, is safe. If I do not oppose socialization or communization when the "other fellow" is the victim, then I accept them in principle; and my failure to object gives them some legitimacy and acceptance. They thrive so that, one of these days, they can be applied to me.

There is no moral difference between making no complaint while one's neighbor is being socialized, and remaining silent while he is being robbed or murdered. In a community, we are all members one of another, as it was written long ago.

James G. Lyne

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James G. Lyne, author of the above editorial, is editor of *Railway Age* and president of the Simmons-Boardman Publishing Corp.

Here's what the men who use ATLAS MORTAR say:

"In my 30 years as a brick mason I have never seen a prepared masonry cement that works as well as Atlas Mortar."*

"Smooth as silk"* Masons like the smooth, easy response to the trowel of buttery, plastic Atlas Mortar.

"True, tight joints"* The outstanding durability of Atlas Mortar is proved by rigid laboratory tests.

"Excellent appearance"* Contractors appreciate the excellent appearance, color and strength of Atlas Mortar.

** Actual quotations from reports of masons and contractors who use Atlas Mortar Cement.*

. . . and these are but typical. We are constantly receiving such reports, praising the outstanding workability, appearance and durability of Atlas Mortar. Try it yourself!

Backed by years of research, Atlas Mortar Cement complies with ASTM and Federal Specifications for masonry cement. For further information, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

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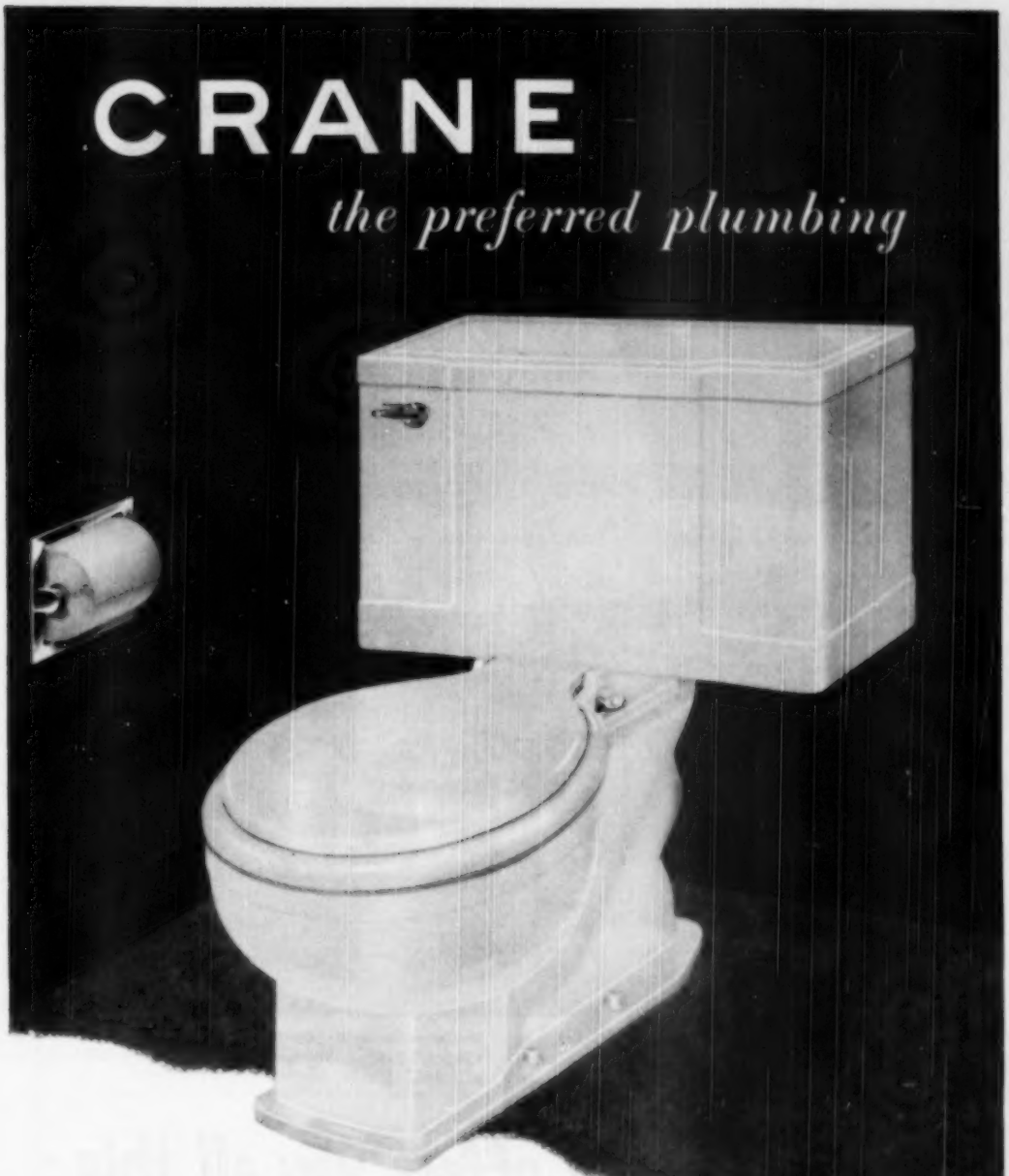
ATLAS MORTAR CEMENT

THE SATIN OF MASONRY CEMENTS

"THE THEATRE GUILD ON THE AIR"—*Sponsored by U. S. Steel Subsidiaries—Sunday Evenings—NBC Network*

CRANE

the preferred plumbing



The Crane *Oxford* Closet offers highest quality below the top price range. An excellent choice for most homes . . . and for the better apartments, resorts, motels, etc. Matching lavatory and bath. Consult your Crane Branch or Crane Wholesaler.

CRANE

CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVE., CHICAGO 5

PLUMBING AND HEATING • VALVES • FITTINGS • PIPE

Here's how to start

This St. Louis sales riot is not an unusual event. Rather, it is the typical success pattern of builders all over the country. From Maryland, Colorado, New York and other sections come similar enthusiastic reports of builders who install General Electric Kitchens. Why not let General Electric help sell *your* houses faster, too?

General Electric offers you all this:

- Tested merchandising programs that have helped so many other builders enjoy phenomenal sales results.
- The brand of electrical appliances that people prefer to all others.
- Assistance in designing and improving kitchen layouts for your houses.
- One source of supply for matched equipment . . . a full line of cabinets and appliances.
- And most important: G-E equipment is world-famous for its dependability! Remember, you can put your confidence in G-E!

a sales riot!

"Rather than spend money to sell our houses, we installed complete General Electric Kitchens so that people would *buy*. Result: We sold 109 houses the very first day!"

Mr. N. R. SCHUERMANN of Schuermann Building & Realty Co., St. Louis, Missouri

Today, more than ever, people want houses that *include* all-electric living.

They want *low-priced* homes that have kitchens in which dishes are washed and double-rinsed automatically—where there's a Disposall® for food waste.

They want plenty of hot water at all times . . . and they want an electric range that takes the trouble and guesswork out of cooking, and a family-size refrigerator.

What Schuermann did

The Schuermann Building and Realty Company offered the people of St. Louis, Mo., that kind of a house for the full price of $8995 . . . with less than $1000 down!

You can see from the photograph at the left what happened. Hundreds of people were waiting to enter the General Electric equipped house at 10:00 a.m. More than 7000 people came out to see the Schuermann home on opening day. 109 people bought houses the very first day!

A suggestion for you

We would like to work hand-in-hand with you to achieve similar results for you in your area. We can help you *pre-sell* your houses just as we have for so many other builders throughout the United States.

Get complete facts about the G-E "Kitchen Package" through your local General Electric distributor, or write to the Home Bureau, General Electric Company, Bridgeport 2, Connecticut.

As little as $4.80 more a month!

You can include General Electric Kitchens in your houses for as little as $4.80 a month extra when the G-E "Kitchen Package" is included in the long-term realty mortgage.

Furthermore, the slight increase in monthly payments may be offset by the economical operation, low maintenance and long life of General Electric appliances!

The new Schuermann home and its General Electric Kitchen made a deep impression on future home buyers of St. Louis. It includes: Dishwasher, Disposall®, Refrigerator, Electric Range, and Steel Cabinets. Think how this type of workseaving electric kitchen would stimulate sales of *your* houses!

You can put your confidence in—

GENERAL ELECTRIC

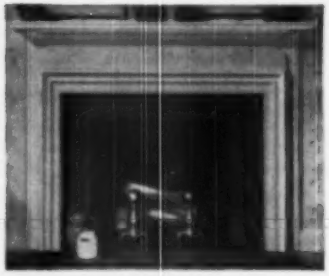
Selectivity

FOR ANY PLAN
ANY STYLE
ANY SPACE

Ranch house—Cape Cod—Colonial—whatever the architectural style—whatever the size or cost of the house—Curtis has woodwork to fit your need. For the Curtis woodwork line is so wide—so varied—that it gives you practically unlimited scope in planning and building homes for every taste, need and pocketbook.

When you select Curtis entrances, mantels, china cases, stairways or kitchen cabinets, you can be sure of some very definite qualities. The materials will be carefully selected for every need. Craftsmanship will be fine because of Curtis precision manufacture—held to the highest standards for 84 years. Architectural styles will be correct. Costs will be moderate.

You'll find it worth while to have complete information on Curtis stock architectural woodwork—just mail the coupon.



For books, prized china and *objets d'art*, Curtis china cabinets provide ideal storage. Here is one of eighteen Curtis styles in a wide price range.

Where the owner wants an entrance above the ordinary, this Curtis design will solve the problem and reflect good taste. Design C-1709—one of many outstanding styles.

A Curtis mantel makes the utility of a fireplace beautiful. Curtis mantels "wear well"—they were designed by leading architects—have fine proportions and detail.

A new Curtis Development —PRESPINE

Prespine—the new wood material for use in panels in Curtis doors and other woodwork—now duplicates the *natural grain of wood!* Prespine panels, made of finely divided wood, will not warp, check or splinter—won't shrink or swell. Prespine is fadeproof . . . can be quickly and economically finished by skilled or semi-skilled labor.

1866 CURTIS WOODWORK

Curtis makes a complete line of woodwork for the modern home. Make your next house "all Curtis."

Curtis Companies Service Bureau
AB-5W Curtis Building, Clinton, Iowa

Gentlemen: Please send me your book on Curtis Stock Architectural Woodwork.

Name.....

Address.....

City.....State.....

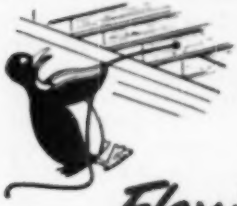
I am ( ) Architect ( ) Contractor ( ) Prospective Home Builder ( ) Student. Please Check.

"Cool!"

The new *"Frosty Finish"* has a cool, smooth, hard feel. Doesn't get soft or tacky.

Clean!

"Frosty Finish" Loomwire will not stick to your hands.

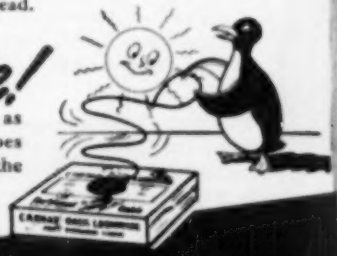


Slick!

The *"Frosty Finish"* won't "dust" or flake off when you pull the cable overhead.

Flexible!

Tests show that in temperatures as high as 125° F. the coiled wire does not stick together . . . pulls from the carton freely . . . is easy to fish.



SOLD THROUGH LEADING ELECTRICAL WHOLESALERS.

At last, a non-metallic sheathed cable that meets every "ease-of-handling" requirement . . . can be stored in warm locations or handled in hot weather without becoming tacky . . . maintains all the moisture- and flame-resistant qualities of the original NE Canvas Back Loomwire.

LISTED BY UNDERWRITERS' LABORATORIES, INC.

NG POINTS TO

HONEYW

MODERNIZATION creates business for entire BUILDING INDUSTRY

VAST MARKET IN OLD HOMES

We're hot on the trail of one of the biggest markets that ever existed for the building industry!

It's the 23,000,000 homes in America that are more than 30 years old. That's more than half the homes there are in this country of ours. And they are sitting there with worn out plumbing, with antiquated kitchens, and with inefficient heating plants.

Those homeowners like the modern comforts and conveniences. They want good heating, too — only we have to remind them.

So we have.

We've started a campaign that is reaching newspapers and radio stations from coast to coast. Hard-bitten editors and newscasters know that people are interested in stories about improving their homes. So they are telling the public how to bring its houses up-to-date.

Naturally, we hope the public will replace old thermostats with our newer models. But anyway, we're telling the people that the best dollar they can spend is to modernize. We think they will.

So climb on the band wagon with us.

Minneapolis-Honeywell, Minneapolis 8, Minnesota. In Canada: Leaside, Toronto 17, Ontario.

CAMPAIGN

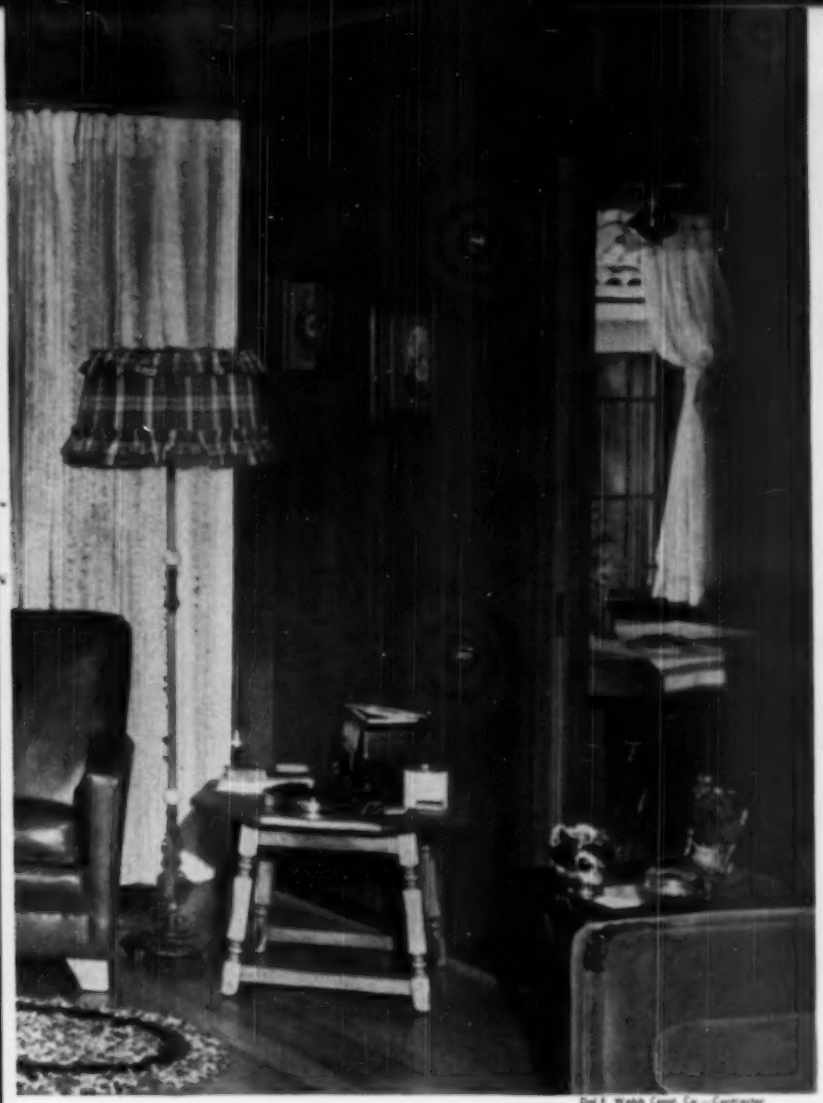
NATION-WIDE CAMPAIGN *Sells* MODERNIZATION TODAY

Ceco Casements . . . *Engineered*

Anyone looking out of a Ceco casement for the first time experiences something in better living. The eye crosses easily to the beauty of the outdoors. There is no limit to the sense of space. And to live with Ceco casements for even a short time, is to appreciate truly sound value. For here, beauty and utility indeed are effectively combined. We believe all this can be attributed to a word—ENGINEERING. Actually, there are three phases of window engineering at Ceco . . . 1. Creative engineering—a ceaseless search for the new to blend with modern architectural effects. 2. Production engineering—organization of manufacturing processes to

CECO STEEL ®

In construction products **CECO ENGINEERING**

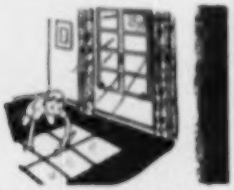


Del E. Webb Const. Co.—Contractor

Advantages of Ceco Steel Casements

Controlled Ventilation—Ventilators open to any position, capturing stray breezes. Ventilation possible up to 100%.

Easy To Open and Close — Windows will not stick or warp. Open effortlessly under all weather conditions.



More Light—Slender frames and muntins provide up to 30% more light, ensuring better vision, more view, too.

More Wall Space—Narrow frames permit up to ⅓ more wall space. A special advantage in small homes or apartments.

Easy to Wash—Both sides of Ceco casements can be washed from within. There are no ladders to climb.

Easy To Screen—Ceco casements are screened on the inside. Storm windows are applied on the inside, too.

for Better Living...

assure the lowest cost for quality. 3. Field engineering—here products are proved by practice. All this means meticulous attention to little things—to perfection of detail. That is why we say, in steel casements—CECO ENGINEERING MAKES THE BIG DIFFERENCE. When you build with Ceco, you know you've used the very best...you're sure of economy too.

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General Offices: 5601 West 26th Street, Chicago 50, Illinois

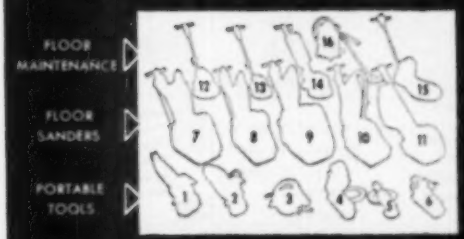
Offices, warehouses and fabricating plants in principal cities

makes the big difference

RUSSWIN *dealers always have the edge . . .*

Keep Up-to-Date with AMERICAN

Profit-Making MACHINES FOR YOU!



EDGERS AND PORTABLE TOOLS. 1—American Spinner Edger, Model B. 2—American Spinner Edger, Model C. 3—American 8½" Portable Electric Saw. 4—American Sanderplane Belt Sander, Model 3. 5—American Speedy Spinner flexible disc sander. 6—American Sanderplane Belt Sander, Model 7. FLOOR SANDERS. 7—American Super 8. 8—American Standard 8". 9—American Standard 12". 10—Little American. 11—American Rental. FLOOR MAINTENANCE. 12—American Deluxe, 17" brush spread. 13—American Deluxe, 13" brush spread. 14—American Deluxe, 13" brush spread, with water tank. 15—American Low Boy. 16—American Wet or Dry Vacuum.

Aggressive engineering keeps American Machines out-front in ability to save job-time and labor for you . . . and *increase your profits!*

In this ALL-AMERICAN "family portrait" you'll find outstanding new members—the sensational new Super 8 Floor Sander . . . new American Rental Floor Sander . . . new American DeLuxe Maintenance Machines . . . new American Wet or Dry Vacuum Cleaning System . . . and the new big-power American 8½" Saw! Also, other American Machines unbeatable for a wide range of everyday jobs in flooring, construction and maintenance. Send coupon for more details.

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FLOOR MACHINES — PORTABLE TOOLS

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The American Floor Surfacing Machine Co.
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Please send latest catalog on the following, without obligation.

☐ Floor Sanders ☐ Floor Edgers ☐ Saws
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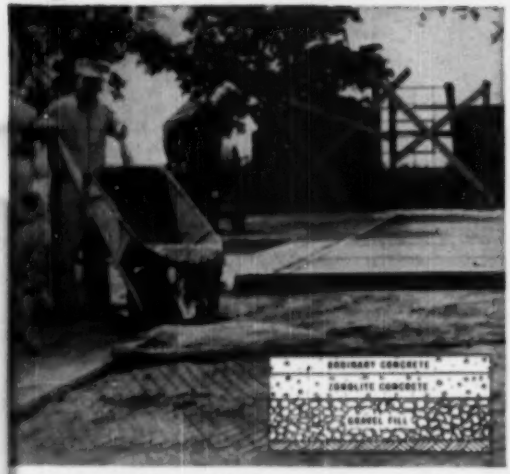
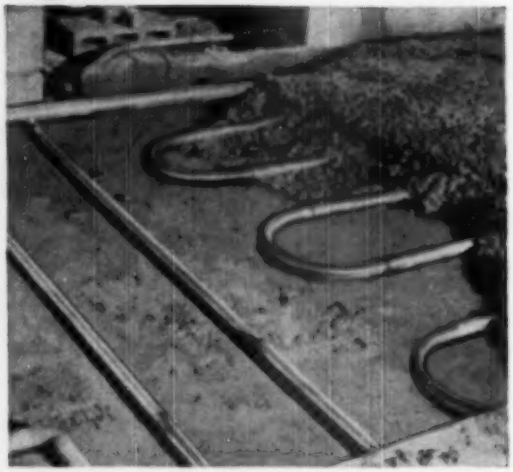
NOW...ON-THE-GROUND FLOORS*

THAT

- ✔ Prevent Condensation!
- ✔ Block Heat Loss!
- ✔ Minimize Heat Lag!





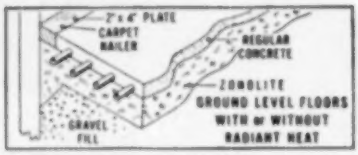
*Important Advantages Result When ZONOLITE VERMICULITE AGGREGATE Replaces Sand and Gravel in Concrete

It has recently been demonstrated by actual measurement of soil temperature at various depths that there is a very considerable loss of heat through floors of ordinary concrete on grade. This explains the common complaint that such floors are cold and tend to become unpleasantly damp through condensation of moisture from the air.

These objections do not apply, however, to on-the-ground concrete floors in which Zonolite vermiculite aggregate replaces the usual sand and gravel. These self-insulating floors prevent condensation—block loss of heat into the earth and, by minimizing heat lag, permit more accurate and immediate response to thermostatic control.

These natural qualities make Zonolite concrete an ideal base for radiant heat pipes. In an experimental installation, soil temperatures differed by 17.5°F. beneath a non-insulated concrete slab and a slab of Zonolite concrete. The soil temperature of 82.5°F. beneath the non-insulated slab indicated extreme heat-loss, while the soil temperature of 65°F. beneath the Zonolite concrete clearly showed its ability to keep heat in.

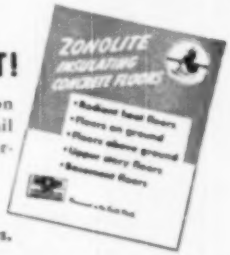
Construction details and other data on the various applications of Zonolite concrete are available without cost to architects and builders. Mail the coupon today.



ABOVE: *Typical use of Zonolite insulating concrete with radiant heating coils to minimize lead, lag and loss of heat into the soil below.*

FREE BOOKLET!

Fill out coupon below and mail today for information on Zonolite insulating concrete floors.



Sold by lumber and building supply dealers

ZONOLITE COMPANY, Dept. AB-50, 135 S. LaSalle St., Chicago 3, Ill.

ZONOLITE BRAND VERMICULITE INSULATION

Member of the Vermiculite Institute

ZONOLITE COMPANY—Dept. AB-50
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Zonolite is a registered Trademark

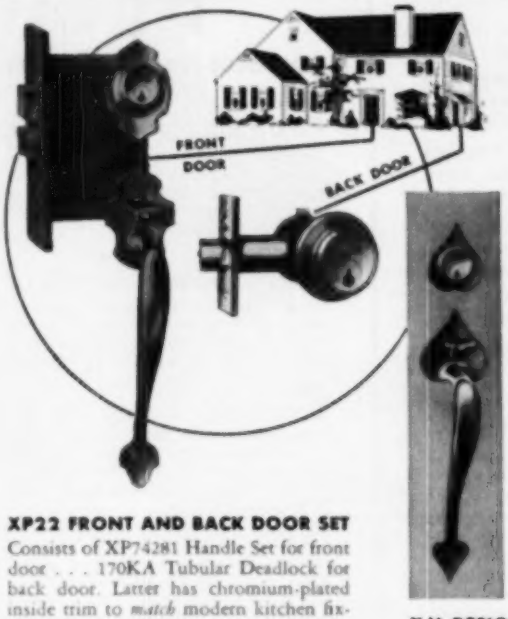
Mail me free information on applications of Zonolite concrete for on-the-ground floors.

Name .....

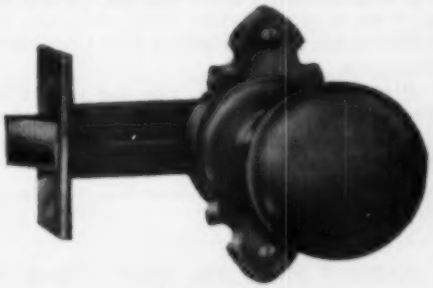
Address .....

City ..... *State* .....

Hardware that stands up to "hard wear"..



No greater security . . . no greater convenience!



CR231 KNOB SET

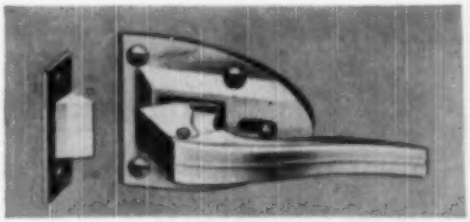
Offered in following styles--latch set, no locking on either side, bathroom set with push-button on rose, emergency key, chrome inside; bedroom set, push-button on rose, provision for emergency key. Automatic throw-off.

XP22 FRONT AND BACK DOOR SET

Consists of XP74281 Handle Set for front door . . . 170KA Tubular Deadlock for back door. Latter has chromium-plated inside trim to *match* modern kitchen fixtures. Front and back door keyed alike.

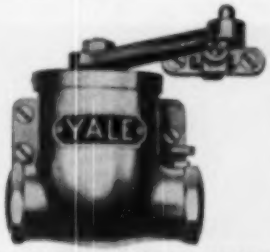
XH DESIGN Same combinations as XP22 Set.

First choice for screen doors!



1011 PUSH-PULL SCREEN DOOR CATCH

Heavy-duty catch for screen and combination doors. Works easy . . . no knob to turn. Sure-holding, positive lock. Quick to install. Rustless metal, bright brass finish.



570 SCREEN DOOR CLOSER

Liquid-type. Quick, quiet, complete closing. Easy to install and adjust . . . no reversing . . . screw holes spotted by full-size marker.

506 AIRLINER SCREEN DOOR CLOSER

Pneumatic-type. Adjustable spring is completely concealed against dirt and rust. Modern appearance, attractive finish. Easy to install on doors of either hand, inside or outside . . . requires only 2 in. between doors.

YALE

Sign of a Well Built House

THE YALE & TOWNE MFG. CO.
Stamford, Conn., U. S. A.

For power, for value, for every job

THEY'RE GREATER THAN EVER

Year after year the nation's truck users buy more Chevrolet trucks than any other make. For every kind of trucking job they prefer Chevrolet power and Chevrolet value.

Now, Chevrolet's two rugged valve-in-head engines give more power than ever. Advance design, solid construction and low prices give Chevrolet more value than ever.

Prove it to yourself. See the new Chevrolet P·L Trucks. Check them for popularity, performance, payload and price. In 1950 they are more than ever America's best truck buy!

CHEVROLET MOTOR DIVISION, *General Motors Corporation*, DETROIT 2, MICH.

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• TWO GREAT VALVE-IN-HEAD ENGINES: the New 105-h.p. Load-Master and the Improved 92-h.p. Thrift-Master—to give you greater power per gallon, lower cost per load • THE NEW POWER-JET CARBURETOR: smoother, quicker acceleration response • DIAPHRAGM SPRING CLUTCH for easy action engagement • SYNCHRO-MESH TRANSMISSIONS for fast, smooth shifting • HYPOID REAR AXLES—5 times more durable than spiral bevel type • DOUBLE-ARTICULATED BRAKES—for complete driver control • WIDE-BASE WHEELS for increased tire mileage • ADVANCE-DESIGN STYLING with the "Cab that Breathes" • BALL-TYPE STEERING for easier handling • UNIT-DESIGN BODIES—precision built.

CHEVROLET

P*L*

ADVANCE-DESIGN TRUCKS

P*opularity L*eaders Chevrolet trucks outsell all others. In every postwar year truck users have bought more Chevrolets than any other make—*proof* of the owner satisfaction they have earned throughout the years.

P*erformance L*eaders The new Chevrolet P·L trucks give you high pulling power over a wide range of usable road speeds—and on the straightaway, high acceleration to cut down total trip time.

P*ayload L*eaders The rugged construction and all-around economy of Chevrolet P·L trucks cut operating and repair costs—let you deliver the goods with real reductions in cost per ton per mile.

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GENUINE CLAY

Floors and walls *stay* good-looking . . . despite little heros with big bats and sharp cleats. Genuine Clay Tile advantages are *all* hits! No scrubbing, waxing or polishing . . . defies stains, scratches, burns and scars . . . good for a lifetime . . . rich decorator colors . . . wide variety of patterns . . . low cost . . . *fired-in* colors . . . never needs replacement . . . best of all—you no longer have to talk "substitutes." Genuine Clay Tile is available *now!*

The Tile Council of America, Room 3401: 10 East 40th Street, New York 16, New York. Room 433: 727 West Seventh Street, Los Angeles, California.

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THE MODERN STYLE IS CLAY TILE

MR. BUILDER

"PREMIUM BUILT" DOOR FRAME FEATURES LIKE THESE

SELL HOUSES!

- Mitres will not open
- Sharply ROLLED Profiles
- Will not warp or crack
- Hinges welded to Frame
- All one-piece construction
- More Permanent

The powerful *plus factor* that sells houses—that's what you get when you specify *premium-built* Aetna Frames. By simply pointing out to your prospects how Aetna contributes guaranteed soundness and premium value to the house, you find them easier to convince. A clinched sale is more apt to follow!

Aetna Frames come prime-coated from the factory in one-piece welded steel. Time and weather won't damage or affect them in any way. Quickest of all frames to erect, they save you innumerable man-hours—and can save you up to $5 per inside opening. Used on a large scale in housing developments and in individual homes. Aetna assures you tremendous mass production economy. Your building supply dealer stocks premium-built Aetna frames in standard sizes.

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Send for FREE Aetna Literature ...no obligation!

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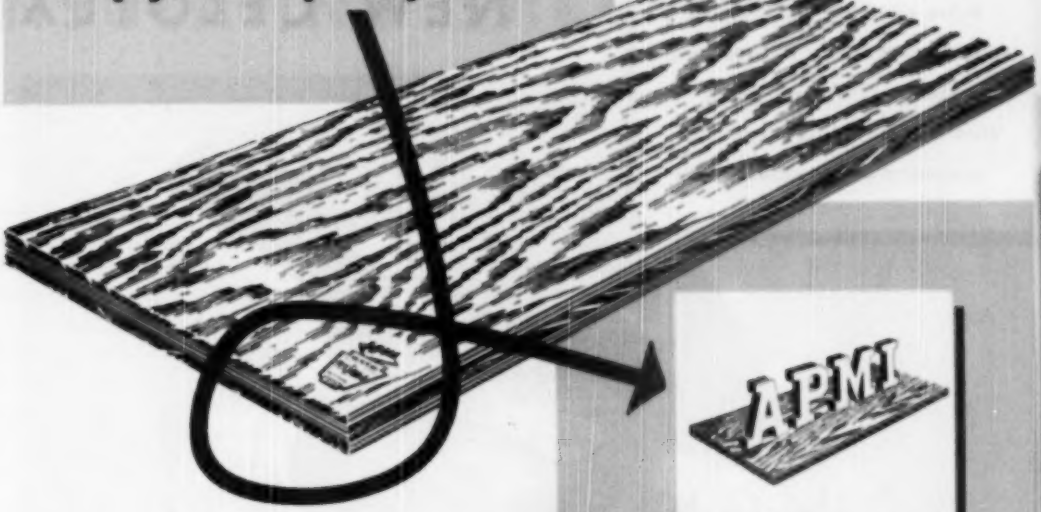
MANUFACTURERS OF STANDARDIZED STEEL DOORS AND FRAMES FOR HOUSING UNITS.

FABRICATORS OF QUALITY HOLLOW METAL PRODUCTS FOR SCHOOLS, HOSPITALS, OFFICE BUILDINGS, ETC.

TRADEMARKED

as well as grademarked ...your double guarantee of plywood quality



Something has been added in the labeling of plywood produced at Associated Plywood Mills, Inc. It is the APMI trademark, and you'll find it together with the DFPA grademark on both exterior-type and interior-type panels manufactured by this company.

This combination of trademark and grademark is your assurance that regardless of where you buy APMI plywood, you get the guaranteed products of a pioneer mill in the industry... And you can purchase APMI plywood at any one of 12 centrally located sales warehouses from coast to coast, from experienced plywood men who are eager to serve you.

Panels up to 60 inches in width and up to 144 inches in length.

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PLYWOOD MILLS, INC.

General Offices: Eugene, Oregon

Now— far stronger, far more

Double-

NEW CELOTEX

1 Waterproofed Inside!

Every one of the millions of tough cane fibres in its insulating board core is *integrally treated* with a waterproofing compound during manufacture.

2 Waterproofed Outside!

This board is then coated on both sides, and on all edges, with a thick, enduring "raincoat" of specially-treated asphalt which seals out moisture.

rigid as well as

Waterproofed!

INSULATING SHEATHING

signs go up faster when you build with CELOTEX INSULATING SHEATHING!

When you build with new Celotex Insulating Sheathing, you assure your customers of stronger, more enduring homes with higher re-sale value . . . homes with effective *sidewall insulation* that means lower fuel bills in winter, greater comfort in all seasons. *No wonder they're easier to sell!*

Always outstanding for rigidity and bracing strength, Celotex Insulating Sheathing is today even stronger, more rigid than ever. It saves money on both materials and labor, because it insulates and builds—all at *one* low cost! Quick and easy to apply. Negligible waste. No building paper needed.

Although Celotex Insulating Sheathing is *double-waterproofed*, it has over *twice* the vapor permeability required by government agencies! Safe even under severe exposure during construction.

No other insulation gives all the advantages of Celotex Insulating Sheathing. For no other is made of long, remarkably strong Louisiana cane fibres. And no other is protected by the exclusive patented Ferox® Process against fungus, dry rot and termites. Yet this strong *rigid insulation*, applied, COSTS NO MORE than ordinary sheathing!

Write today for your free copy of the informative new Celotex booklet, "*How You Can Build Better Homes at Lower Cost.*" Gives full information on Celotex Double-Waterproofed Insulating Sheathing. The Celotex Corporation, Chicago 3, Illinois.

TYPES AND SIZES:

25/32" Big Board: 4' wide x 8', 9', 10', 12' lengths; square edges

25/32" V-Type Center Matched: 2' wide x 8' long; center matched on long edges

½" Big Board: 4' wide x 8', 9', 10', 12' lengths; square edges.

THE FAST, THRIFTY WAY TO CREATE BEAUTIFUL INTERIORS....

Celotex Insulating Interior Finishes

With the new, improved Celotex Insulating Interior Finishes, you can easily create finished walls and ceilings of unusual charm and distinction. And for surprisingly little money! For these pre-decorated structural panels build, insulate and decorate, all at one low cost. They're amazingly quick and easy to put up.

The range of exclusive new whites and blended colors and textures, and the wide choice of shapes and sizes, enable you to achieve a variety of modern decorative effects. Available in Tile Board, Building Board and Finish Plank. Write now for details.

To make your homes easier to sell . . .

BUILD WITH GENUINE CELOTEX BUILDING PRODUCTS

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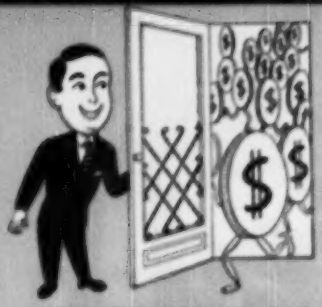
THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS



Mack says... You'll open the FITS-ALL *Adjustable*

Our Newest Alacrome
FITS-ALL No. 5
Adjustable Screen Door
GRILLE

The most beautiful, ornamental Fits-All Grille of them all! Its gracefully designed scrolls insure a wide sales appeal. Also fully adjustable for nearly all standard-size screen doors. Made of Alacrome metal with a permanent, silvery-satin finish that will not rust or tarnish. Note the ingenious patented holder in the lower right corner of the grille as installed on the door to the left. It permits easy adjustment of the scrolls to fit the door while being installed. Each grille packed in individual, attractive, fully illustrated display carton. We're sure this new grille will soon lead the field, so order your stock right away!

IDEAL FOR COMBINATION SCREEN-STORM DOORS

Our new FITS-ALL No. 5 Screen Door Grille is fully adjustable for many styles of screen doors. For example, on the combination screen-storm door shown at the left, the scrolls may be installed in both the upper and lower sections to create a striking effect. Such graceful designs have sales-appeal as *well as eye-appeal!*

COLORFUL, SALES-MAKING DISPLAY CARTON

Each grille is individually packed in this eye-catching, colorful display carton with complete instructions for installing and suggestions for arranging scrolls.

Nationally Advertised

We tell the millions of readers in these leading national magazines to buy our products from you. Order today and keep well supplied!

door to new sales with

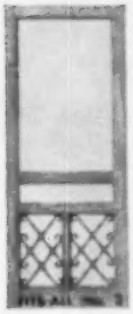
SCREEN DOOR GRILLES

THEY'RE PRACTICAL, POPULAR and PROFITABLE!

With the addition of the beautiful new FITS-ALL No. 5 our line of Fits-All Grilles is more complete, *more eye-appealing than ever before!* Now, your customers have an even wider choice of these attractive grilles.

Each one is fully adjustable to standard-size screen doors! Easily installed. Every Fits-All Grille is artistically designed and made of Alacrome metal with a beautiful silvery-satin finish that won't rust or tarnish.

You'll want to have a complete selection of *all* 5 styles on display because when your customers see 'em, they'll want to buy 'em—so stock up *NOW!*

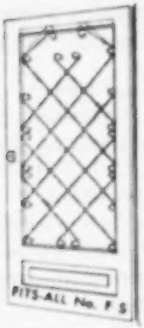


FITS-ALL NO. 1 →
STANDARD GRILLE

ADJUSTABLE TO DOORS AND WINDOWS

This attractive grille will fit nearly any door. Its scissor-like, accordion action permits easy adjusting from 18" to 37" between stiles. Also used as a window guard to keep prowlers out . . . and to keep little children from falling out window. Packed 12 to carton—screws furnished.

← **FITS-ALL NO. 2** — Comes in pairs to fit the lower panels of doors with divided sections as illustrated. Fits doors from 30" to 36" in width. Also packed 12 to a carton.



←

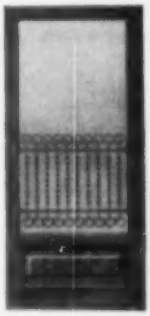
FITS-ALL NO. FS

A new, graceful full-size grille. Two top bars are flexible to allow easy fitting to door. Packed 6 to a carton.

→

Nu-WAY SCREEN DOOR GRILLE

A sturdy, attractive grille that anyone can install. Furnished in black enamel finish in 3 sizes to fit doors from 30"-32", 36" and 42".



Nu-WAY PUSH GRILLE — An easy companion sale for screen door grilles. Fits above grille as shown at left. Made for 32" and 36" doors—packed 12 to carton.

Your order will be shipped same day received!

MACKLANBURG-DUNCAN CO.

OKLAHOMA CITY 1, OKLAHOMA

MACKLANBURG DUNCAN CO.
QUALITY PRODUCTS

a $1,250,000 investment

...with great promise for you!

We've just invested in foresight—price $1,250,000.

That's what we'll be spending during the next few years on research to reduce the cost and improve the qualities of structures made with clay products.

This, in spite of the fact that the structural clay products you use today are being produced and sold faster than ever before.

Why, then, spend more than a million dollars for research?

. . . because we members of SCPI like being tops in your preference and want to stay at the top.

. . . because we believe modern research can give you still better brick and tile—easier to use, in more places, at less cost.

. . . because we know that even a slight improvement in our products will have tremendous potential benefits—for the millions of people who are served by structural clay products and for the building industry which makes such wide use of them.

With so much to be gained, by all concerned, SCPI feels that this million dollar investment in our future, and yours, is indeed sound.

NEW SCPI DIRECTORY: Write to your regional SCPI office for this handy reference source. Gives you names and addresses of SCPI member companies, types of brick and tile each makes, and other valuable information for users of Structural Clay Products.

12 regional offices to help you —

Structural Clay Products Institute

New Haven 10, Conn., 341 State St.

New York 17, N. Y.
1949 Grand Central Terminal.

Philadelphia, Pa., 1518 Walnut St.

Canton, Ohio, 306 Market Ave., No.

Pittsburgh 22, Pa.
502 Benedum Trees Building.

Chicago 1, Illinois, 228 N. La Salle St.

Ames, Iowa, 120½ Welch Avenue.

Denver 2, Colo., 208 Kittredge Bldg.

San Francisco 5, Calif.
55 New Montgomery Street.

Seattle 1, Wash., Central Building.

Clay Products Association
of the Southwest

Austin, Texas, Littlefield Building.

Oklahoma City, Okla.
First National Building.

SCPI

MAIN OFFICE

STRUCTURAL CLAY PRODUCTS INSTITUTE

1520 18th Street, N. W., Washington 6, D. C.

Letters to the Editor

Architectural Competition

Sir: On behalf of the National officers and staff, I want to thank you and the *American Builder* for the really outstanding contribution you made to our program this year at the Chicago Convention.

I have just had my first opportunity of reading the four Convention issues you published and I want to tell you that I think they are the finest thing yet. We have indeed come a long way since the first issues of this sort were printed.

As nearly as I can learn, the architectural contest was a complete success and resulted in some of the finest publicity we have received.

Beyond all of this, the National Association has an immense obligation to the *American Builder* for your support in all phases of the Convention during the last five years. No one knows better than I what time, effort and money you have expended with the result that the whole affair is immeasurably larger and more constructive because of your support. I hope nothing will ever diminish this happy working relationship between us, particularly when I consider the grave dangers our industry faces—dangers far greater than that of temporary lapses of insuring and financing devices.

Frank W. Cortright
Executive Vice President
National Assn. of Home Builders
Washington, D. C.

Congratulations

Sir: Our Convention is now a matter of history, but I feel I would be remiss in my duty as Chairman if I were not to express my sincerest thanks and appreciation for the contribution of your time and effort in making this Convention the tremendous success that it was.

We of the National Association of Home Builders feel indebted to you for the service you have rendered us and the Industry in your efforts at the Convention.

E. M. Spiegel
Chairman, NAHB
Annual Convention
Passaic, N.J.

Sir:

I was very happy to hear of your being presented with the Silver Plaque from the Middle Atlantic Lumbermens Association.

I can think of no man in the industry who is more fully entitled to receive this plaque than you.

My most sincere congratulations to you.

W. C. Bell
Managing Director
Western Retail Lumbermens Assn.

Our Mistake

Mr. William T. Dreiss, Architect
North Hollywood, Calif.

Dear Mr. Dreiss:

Thank you for reminding us of our error in the February issue. The last paragraph on page 117 ("Motels—A Big Opportunity for Builders") should have begun, "Owner O. A. Pearce . . ." instead of "Architect O. A. Pearce . . ." since the architect for the Holiday Inn motels was yourself. Please notice that on page 155 we have shown detail drawings of a serve-through idea designed by yourself, and that at the bottom of page 154 the courtesy line is for the Douglas Fir Plywood Association—a courtesy line which should have gone with the Technical Guide story on page 162! One mistake, like an A-bomb, seems to set off a chain reaction. We're sorry for the mixup.

The Editor

Attitude Toward Labor

Sirs: I am in receipt of your letter of February 10, regarding the renewal of subscriptions for the *American Builder*.

The members of the Local Union voted at its last meeting, not to renew any subscriptions, because of the Anti-Labor editorials.

We brought this matter to your attention on your visit, last fall; and, unless your editors can see fit to discontinue their anti-labor practices, we shall discourage all labor from subscribing to your magazine.

L. W. Rushing
Recording Secretary
United Brotherhood of
Carpenters and Joiners
Tampa, Florida

EDITOR'S NOTE: I was greatly surprised to learn that you consider our editorial policy to be anti-labor. Upon receiving your letter I carefully reread all of the editorials I have written in the past year, as well as those written by

(*Continued on page 222*)

MASONRY STAYS TIGHT WITH KAY-TITE

WHITE and 9 COLORS
CREAM
BUFF
YELLOW
SPANISH BUFF
GREEN
BLUE
GRAY
ROSE
BRICK RED

KAY-TITE COMPANY
Box 550
West Orange New Jersey

don't buy blind...

buy Columbia VENETIAN BLINDS

Some people may tell you that all blinds are alike—but they haven't been around much. Knowing architects—institutional users and builders select blinds with their eyes wide open . . . specify Columbia for unusual requirements and extra quality.

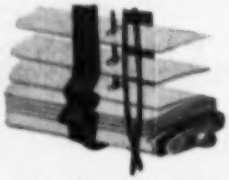
In short, insist on C. C. C. when you specify blinds. You'll get famous Columbia-Controlled-Construction. The man who pays the bills and everyone else using those Columbia Blinds will be thankful when you choose the best. For years and years and years Columbia Blinds will serve them well and beautifully. Remember—the bigger the job—the better the price.

Columbia Venetian Blinds and Window Shades are sold only in leading department and furniture stores and shade shops designated as Columbia Authorized Dealers.

We will gladly submit specifications for Venetian Blinds that can become a part of the General Contractor's bid. This includes a recommendation for correct type of slats and tape; mechanism; method of manufacture and proper installation. Let us call on you and discuss your particular problems.

COLUMBIA QUALITY POINTS

AUTOMATIC SAFETY STOP holds blind where you want it—no slipping. All-metal headbox completely encloses satin-smooth working parts.



SNAP-STOP is Columbia's exclusive device that keeps blind from rattling when window is open. Choice of enamel-coated aluminum or steel slats, galvanized to prevent rust. Easy to clean.

CLIP-GRIP at top and bottom of Venetian blind makes tape removal quick and easy.

ROLLER-LIFT, special mechanical feature for extra large blinds, means easy operation. A child can raise and lower the biggest blind.

Columbia
VENETIAN BLINDS
and WINDOW SHADES

THE COLUMBIA MILLS, INC. • 428 SOUTH WARREN STREET, SYRACUSE 2, N.Y.

Right from House Beautiful

A preview of the June 1950 issue of House Beautiful reaching your best customers on or about May 19th

June House Beautiful to feature . . .

"BIG THREE" PACE-SETTER HOUSE

Climate Control, Privacy, American Style of Design in Ten-Page Presentation

For the first time since their introduction to the public, HOUSE BEAUTIFUL will merge its three big building ideas of 1950—Climate Control, Privacy and American Style of Design in its exciting June Pace-Setter House presentation! And the $25,000 selling price of the house featured proves that all three aspects of better living can be had at moderate cost, if the home-planner knows what to look for!

Built in the San Francisco Bay area of California, the primary climatological problem of this first pace-setter house of 1950 is wind control. But its design is basically adaptable to the problems of builders all over the country because wind control is a universal factor in determining climate-wise living comfort. If you study the illustration, reproduced on this page from the forthcoming issue, you'll see how the mass of the house itself is designed to act as a wind-screen, deflecting steady winds up and over the sunny, enclosed patio. An estimated 2,500,000 home-conscious readers will find sensible reasoning behind this drawing and the extensive, detailed wind study included in the June issue as HOUSE BEAUTIFUL's climate story of the month.

The above Pace-Setter House is just one example in the parade of practical, beneficial features June HOUSE BEAUTIFUL is presenting to the building trades and its home-planner families.

You'll find them sensible selling points, when discussing future homes with your best prospective customers.

You can also see how privacy and the American Style of Design are graphically illustrated in the drawing on this page. Even though this house is built on a 65 foot lot, the garage along the street front, daily living focussed in or overlooking the enclosed patio, the strategic fence and the grouping of trees in the proper place all add up to a decided country feeling. The emphasis on comfort and convenience, the lack of ostentation and insistence on good design, the use of materials available anywhere are typically American.

As a Practical Aid To Your Business . . .

HOUSE BEAUTIFUL will continue to bring you a monthly preview of the building information and ideas filling each forthcoming issue . . . well in advance of publication date. Every month, you'll be able to plan your selling strategy ahead of time . . . to use HOUSE BEAUTIFUL's enormous influence *while* it's working on the minds of your best prospects. Look for it regularly in American Builder! You'll find it a practical *and profitable* aid to your business!

. . . . *more* ——→

right from House Beautiful

advertisers' BULLETIN BOARD

A directory of advertisers whose products are appearing in the June HOUSE BEAUTIFUL . . . which will reach your best customers on or about May 19th. FREE mounted counter cards for those products preceded by a number are available. See coupon on last page for easy method of ordering.

INSULATION

1. ***Balsam-Wool Sealed Insulation***
Wood Conversion Company

SURFACING MATERIALS

a. WALLS

2. ***Blue Ridge Patterned Glass Wall Paneling***
Blue Ridge Sales Division
Libbey-Owens-Ford Glass Company

3. ***Mississippi Structural Glass***
Mississippi Glass Company

MODERNIZE YOUR HOME WITH DECORATIVE GLASS is the title of a new booklet issued by the Mississippi Glass Co., St. Louis. Profusely illustrated the booklet features outstanding installations of Structural Corrugated and other arresting decorative glass patterns in the modern home. Free on request.

4. ***PC Glass Blocks***
Pittsburgh-Corning Corp.

5. ***U. S. Weldwood Plywood***
U. S. Plywood Corp.

Weldwood Plywood is the ideal way to satisfy the desire for at least one wood-paneled room, adding beauty and sales value to the house at relatively little cost. Show your builder customers how little it costs—you'll sell plenty of Weldwood and they'll sell their houses faster.

6. ***Romany Tiles***
United States Quarry Tile Co.

7. ***Thermopane Insulating Glass***
Libbey-Owens-Ford Glass Company

8. ***Trend of the Times Wallpapers***
C. W. Stockwell Co.

b. FLOORING

9. ***Amtico Rubber Flooring***
American Tile & Rubber Co.

Knowing that smart colors clinch sales, AMTICO Rubber Flooring presents the most complete line of colors ever offered in rubber tile; Twenty-two colors, high-style shades of great promotional value, and "bread-and-butter" staples. Full-color advertising in class consumer magazines throughout 1960 will help boost your Amtico volume to new highs.

c. ROOFING

10. ***Carey "Fire-Chex" Shingles***
The Philip Carey Mfg. Co.

Carey Fire-Chex Shingles are a real roofing improvement—the first in many years. Up to 100 times more fire-safe than ordinary shingles; with "shadow-blends" in red, green, blue and gray; copyrighted as "works of art"; Fire-Chex offer builders and dealers more value to sell than roofing ever did before.

DOORS, WINDOWS & EQUIPMENT

11. ***Alcoa Aluminum Windows***
Aluminum Company of America

12. ***Curtis Silentite Windows***
Curtis Companies Service Bureau

13. ***Clearview Venetian Windows & Doors***
Clearview Venetian Window Co.

14. ***Columbia Window Shades***
The Columbia Mills, Inc.

****Warner Weather-Master Screen & Storm Sash Combinations***
Warner Mfg. Corp.

PAINTS

15. ***Ramuc for Pools***
Inertol Co., Inc.

16. ***Nu-Hue Custom Color Paints***
Martin Senour Company

SANITARY EQUIPMENT

a. PLUMBING

17. ***American-Standard Dresslyn Lavatory-Dressing Table***
American Radiator & Standard Sanitary Corp.

18. ***W. A. Case Plumbing Fixtures***
W. A. Case & Son Mfg. Co.

19. ***Church Seats***
C. F. Church Mfg. Co.

20. ***Firestone "Velva-Flo" Aerator***
Firestone Tire & Rubber Co.

The lady of the house is going to agree that this new invention fills a crying need in her kitchen. The amazing Velva-Flo AERATOR takes splashes and spatters out of running water. A simple attachment for the standard kitchen faucet—it transforms splashing water instantly into a foamy, clingy stream. Also speeds up washing and rinsing of dishware.

****No-Drip Tape***
J. W. Mortell Co.

21. ***Permutit Automatic Water Softener***
The Permutit Company

A revolutionary automatic water softener at a low price has just been produced by The Permutit Company, originator of water conditioning. Here is a *quality* water softener for even moderate-income families. It sells for 43% less than comparable pre-war automatics. A few choice dealer franchises available.

b. WATER HEATERS

22. ***Permaglas Automatic Gas Water Heaters***
A. O. Smith Corporation

Another dramatic ad in the June issue. It's your ad, paid for by A. O. Smith. Put it to work using tie-in materials now available. The 20" x 27" ad blowup recently mailed to all A. O. Smith Registered Dealers will remind your prospects of Permaglas, the water heater that can't rust because glass can't rust.

c. FOOD WASTE DISPOSER

23. ***In-Sink-Erator Food Waste Disposer***
In-Sink-Erator Mfg. Co.

KITCHEN CABINETS

****Lyon Kitchens***
Lyon Metal Products, Inc.

HEATING

24. ***Thermostats & Chronotherm***
Minneapolis-Honeywell Regulator Co.

25. ***Mor-Sun Furnace***
Morrison Steel Products, Inc.

26. ***Mueller Furnace***
L. J. Mueller Furnace Co.

Mueller Climatrol, (climate control for comfortable living) manufactured by the L. J. Mueller Furnace Company of Milwaukee, for 93 years builders of top quality heating equipment. The complete Mueller Climatrol line includes furnaces, winter air conditioners, conversion burners, boilers, unit heaters, and cooling equipment. Write for "All Product" catalog.

27. ***L. P. Winkler Oil Furnace***
U. S. Machine Corporation

****Webster Base Ray Heating***
Warren Webster & Company

28. ***Williams Oil-O-Matic***
Williams Oil-O-Matic Division
Eureka Williams Corporation

Any questions about oil heat? Williams Oil-O-Matic's booklet, "There is a BIG Difference in Oil Burners", offers a clarifying "buyer's guide". Candid comparison chart shows all types and kinds. Oil-O-Matic burns ANY domestic fuel oil, including the new better catalytic oils.

COOLING, VENTILATING, AIR-CONDITIONING

29. ***Chelsea Home Comfort-Cooling (Attic Type) Fans***
Chelsea Fan & Blower Co.

Complete package units for attic floor or attic wall mounting; spring-supported, quiet, vibration-free. Easy to install. Sizes from 24" to 60"; with guaranteed ratings from 5000 to 28,000 CFM. Request literature on operation and installation. Models for homeowners, rented homes and apartments.

30. ***Ilgdualaire Portable Window Fan***
Ilg Electric Ventilating Company

When you own an Ilgdualaire double purpose fan and one of those terrific summer heat waves strike, you can sit back and relax in the shade-tree comfort of your own home. Sleep under blankets while others swelter. Your room temperature will drop as much as 20° with ILG fans.

31. ***Fedders Room Air Conditioner***
Fedders-Quigan Corporation

32. ***Frigidaire Electric Dehumidifier***
Frigidaire Division of General Motors Corp.

Here's a sure simple way to check moisture damage — electrically and automatically! The amazing Frigidaire Electric Dehumidifier passes damp air over chilled coils—forcing moisture to condense into container or drain. It's been proved in thousands of home and business installations—is used by many stores to protect valuable inventories.

33. ***Mitchell Room Air Conditioner***
Mitchell Manufacturing Co.

The makers of the world's finest air conditioners, Mitchell Manufacturing Company, feature their ½ ton and ¾ ton models. Available in decorator's beige, the Mitchell cools, dehumidifies, filters, circulates, ventilates. Quiet, easier to install than television set, outperforming every other room air conditioner for home or office. Folder, "What are the FACTS" available.

34. *Oasis Air Drier*
Eacy Mfg. Co.
New, OASIS AIR DRIER, an economical, electrical appliance for automatically removing excess moisture from air. Reduces humidity. Ideal for installations in basement workshops, recreation rooms, department store warehouses, bank vaults, etc. Eliminates age-old problems of mold, mildew and rust on valuable machinery, luggage and clothing.

35. *Sno-Breeze Air Cooler Fans*
Palmer Mfg. Corp.
Solvay Air-Dryette, Jr.
Solvay Sales Division—Allied Chemical and Dye Corporation
The new Air-Dryette, Jr. absorbs dampness in basements, closets, etc. Absorbs up to 3½ quarts per day. The Air-Dryette is inexpensive, clean, safe, easy to use. For nearest dealer and informative booklet, write Solvay Sales Division.

36. *Torrington Moving Air Book*
Box 808 Torrington, Conn.

37. *Vent-A-Hood Kitchen Ventilator*
Vent-A-Hood Corp.
Covering the ENTIRE range area, Vent-A-Hood instantly removes all cooking steam, grease vapors, odors and heat . . . without interfering with air-conditioning or heating systems. Windows, walls, woodwork and furniture retain their fresh, clean, new appearance. 250,000 owners tell us that the extended life of decorating plus savings on cleaning bills for rugs, draperies and furnishings more than pay for a Vent-A-Hood. Information and literature on request.

38. *Rusco's Magic Panel Window Ventilator*
The F. C. Russell Company

MAJOR APPLIANCES

39. *Deepfreeze Refrigerator with Freezer Compartments*
Deepfreeze Division—Motor Products Corp.

40. *"Suds N' Rinse" Dishwasher "Quick-Suds" Washer*
Osborn Products Co.

41. *Philco Home Freezer*
Philco Corporation

92. *Presteline Refrigerator*
Leeson Steel Products, Inc.
Presteline Refrigerators—Special traffic promotions available on new 1950 lines featuring "Five Zone Refrigeration". Beautiful styling accents full-length door and special design compartments for each type of food. 8 and 9 cubic foot models. Prices start at $199.95 for a big "8".

MASONRY

42. *Marble for the Home*
Marble Institute of America
A new booklet, "Marble for the Home" is made available for free consumer distribution by the Marble Institute of America, Inc. This copiously illustrated booklet with pages in full color is part of a new campaign by the Marble industry intended to keep pace with a revived interest in marble for the home.

43. *Portland Concrete*
Portland Cement Association

HARDWARE

44. *Soss Invisible Hinges*
Soss Manufacturing Company
Soss Invisible Hinges are mortised in the door and the jamb where they are completely hidden from view. This unique feature allows the flush, smooth, streamlined interior effects that are so necessary to really modern architecture. Tie in your sales promotions with Soss HOUSE BEAUTIFUL advertising and increase your profit picture.

LIGHTING FIXTURES

45. *Universal Pacemaker Glass Lighting Fixture*
Lightolier, Inc.
"Universal Pacemaker" was specifically designed by Lightolier to help builders sell houses faster. A boldly scaled textured glass bowl suspended by highly-styled chandelier-like clasps, it achieves a "built-in" look at a nominal cost. Available in 15 different models, some with "co-louvered" lens spotlights.

COMMUNICATION

46. *Nutone Chimes*
Nutone Corp.
New homes sell faster with features that appeal to home-buyers like the inviting tones of NuTone Door Chimes. Write for facts showing how NuTone products make homes more attractive and saleable without straining your budget.

MISCELLANEOUS STRUCTURAL MATERIAL

47. *Never-Stain Aluminum Nails*
Nichols Wire & Aluminum Co.

FENCES

48. *Dubois Woven Wood Fences*
Dubois Fence & Garden Co., Inc.

49. *Rusticraft Woven Picket Fences*
Rusticraft Fence Co.

PLANT FOODS—WEED KILLERS

50. *Vigoro, End-o-Pest, End-o-Weed*
Swift & Co.

GARDEN EQUIPMENT AND ACCESSORIES

Allenco Parkside Sprinkler
W. D. Allen Manufacturing Co.
All Metal Spade Rake
All Metal Company

51. *Avon Lawn Sprinkler*
Division of General Screw Machine Products, Inc.

52. *Crystal-Mist Lawn Sprinkler*
Chicago Roller Skate Co.
Sprinkler Division
Eshleman Power Mowers
Eshleman Co.

53. *Jacobsen Power Leaf Mill with Mower*
Jacobsen Mfg. Co.
Gravely Tractor
Gravely Motor Plow & Cultivator Co.
Iri-Gator
Thomas Manufacturing Company
Majestic Outdoor Fireplace Unit
The Majestic Company
A fast-moving, profitable item for Spring and Summer sales. An all-metal, durable unit around which purchaser builds fireplace of own choice of material and design. Cast iron bar grates adjustable for charcoal or wood. Offered in four sizes and types, economically priced. Free display card, mats and other sales promotional material.
Meko Seedling Spoon
Meko Company

54. *Moto-Mower Power Mower*
Moto-Mower Company
Ralmar All-Aluminum Wheel Barrow
Ralmar Products Co.

55. *Sunbeam Hedge Trimmer*
Sunbeam Corporation
America's favorite. Powerful. High Speed. Lightweight. Easy-to-handle. Simple to operate. So light a woman can easily use it. Exclusive clutch prevents damage to blades or gears from wire, woven fence, etc. A precision instrument in every detail—by the makers of famous Sunbeam electrical appliances.

56. *Wiss Flower Cutter*
J. Wiss & Sons Co.
New, unique Flower Cutter-Holder by Wiss, $2.95. With one hand and one motion you can cut and hold out-of-reach flowers. Holder is made of aluminum, weighs 5 ozs., is 18" in length.

SWIMMING POOLS

57. *Koven All Steel Swimming Pools*
L. O. Koven & Bros., Inc.

*No counter card available.

Send for your FREE House Beautiful Window and Counter Display Card this easy way . . . .

AB May

Circle the numbers below which appear beside the advertisements you wish mounted, fill in your name and mailing address and mail coupon to: *Merchandising Division, HOUSE BEAUTIFUL Magazine, 572 Madison Avenue, New York 22, N. Y.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26	27	28
29	30	31	32	33	34	35	36	37	38	39	40	41	42
43	44	45	46	47	48	49	50	51	52	53	54	55	56
57	92												

NAME _____

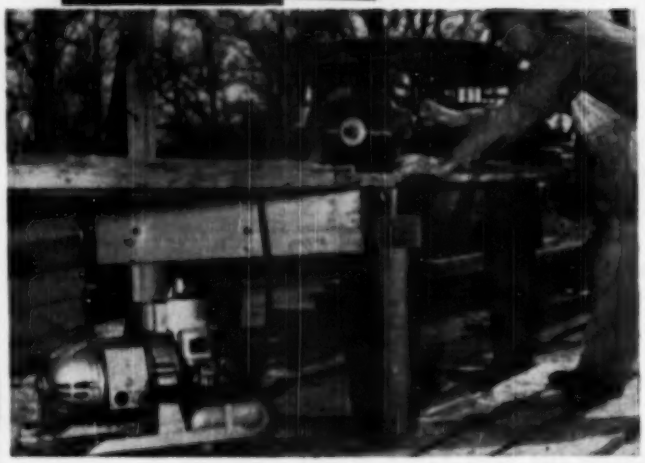
ADDRESS _____

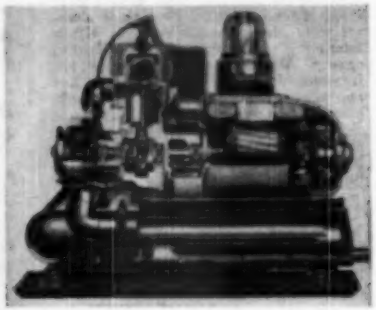
CITY _____ ZONE _____ STATE _____

You Need All Three...You Get All Three

1. PERFORMANCE, 2. DEPENDABILITY, 3. SERVICE

HOMELITE *Carryable* GENERATOR





1. Performance. True, a Homelite Gasoline Engine Driven Generator is light enough for one man to pick up and carry but its performance is big enough to operate all your electric hand tools. In fact, it gives you power *plus* . . . power plus a large overload capacity . . . power plus a constant voltage under all loads . . . power that isn't sapped by long dangerous cables. Easy to get on the job; quick to start at all times, never bothered by extreme temperatures, a Homelite will keep your power tools going at peak efficiency always. It will save time and money for you on all jobs. Ask for free demonstration and see for yourself.

2. Dependability. For more than 25 years, Homelite engineers have specialized in building carryable gasoline-engine-driven units. Their experience in building close to three hundred thousand of these units has been responsible for the simplicity of design and precision construction with finest materials that insure long-haul dependability and lowest maintenance costs.

3. Service. A Homelite seldom needs service, but when it does, there's a trained Homelite service man near you . . . a man who will drive his truck right out to your job and put your Homelite in perfect operating condition. This prompt, competent service is a great money saving factor for those who want to get continuous production out of their power tools.

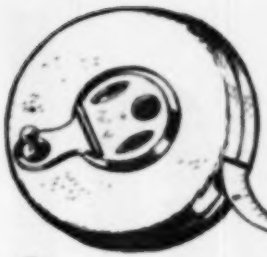
STICK TO THE RULE OF THREE 1. Performance 2. Dependability 3. Service, and you'll always stick to a Homelite

DEPENDABILITY · PERFORMANCE · SERVICE

HOMELITE CORPORATION

808 RIVERDALE AVENUE PORT CHESTER, NEW YORK

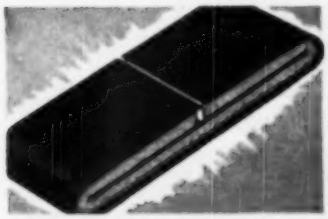
MANUFACTURERS OF HOMELITE CARRYABLE PUMPS • GENERATORS • BLOWERS • CHAIN SAWS • PAVING BREAKERS



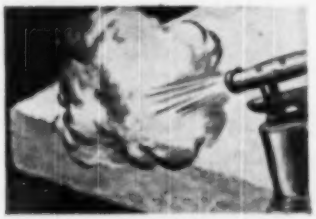
8-FOOT

BLANKET-TYPE ROCK WOOL BATTS

Warm Up Your Insulation Business with this Easy-to-Store, Easy-to-Sell Barrett Product!

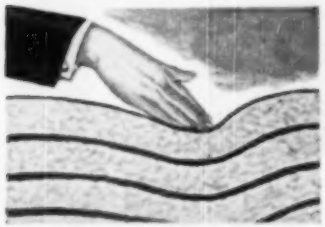


8-FOOT LENGTHS. Go on faster. Fewer seams—an unbroken vapor barrier from floor to ceiling—mean better insulation, less condensation. Also available 15" x 24" and 15" x 48", full and semi-thick.

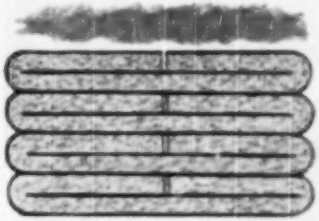


FIRE-SAFE. Barrett* Rock Wool Insulation is a fire-proof material—functioning as a barrier to the spread of fire. A blow-torch won't burn it.

SOFTENS SOUND. Cuts down outside noises and, strategically applied to partitions between rooms (as in the case of a bathroom), it virtually eliminates sound transference.



WON'T LUMP UP. Firm, springy Barrett Rock Wool doesn't "drift" or get lumpy. High resilience assures uniform density of insulation over all areas.



NO STORAGE CASUALTIES. Batts can be stored for long periods and still spring back to specified thickness when removed. No "flatties" at the bottom of the pile!

QUICK DELIVERY. Barrett's conveniently located distribution points assure immediate attention to your orders, no lost sales through empty shelves.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.
205 W. Wacker Drive, Chicago 6, Ill.
1327 Erie Street, Birmingham 8, Alabama
36th St. & Grey's Ferry Ave., Philadelphia 46, Pa.

Barrett

*Reg. U. S. Pat. Off.

Homes sell faster when you install

Stanley *Floating* Door Equipment

You build more value into a house . . . give people what they *want* when you provide Stanley Floating* Garage Door Equipment. Its exclusive Floating Action (doors literally *float* up out of the way) has caught on with home buyers.

Old doors or new can be equipped with this modern garage door hardware. It's easy to install, and the Stanley line includes a type to fit every need and pocketbook, from estate to small home owner.

Your prospects will see Stanley FLOATING Door Equipment advertised in the POST. They're already familiar with "Stanley" — the recognized, *preferred* name in hardware. Take advantage of the demand —equip the homes you build with Stanley *Floating* Door Equipment†. It's a real selling PLUS! Get all the facts and details.

*Reg. U.S. Pat. Off.

The Stanley Works, New Britain, Conn.

†FOR ANY RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DOOR THAT LIFTS · SLIDES · SWINGS · ROLLS · FOLDS.

STANLEY

Reg. U.S. Pat. Off.

HARDWARE · TOOLS · ELECTRIC TOOLS · STEEL STRAPPING · STEEL

LOW* maintenance cost... an important reason

Gas Refrigerators were chosen for these 1,860 Beach-Haven Apts., Brooklyn, N. Y.

STAYS SILENT . . . LASTS LONGER

Servel

The GAS Refrigerator

"OF the many features I like about the Servel Refrigerator," writes Fred Trump, prominent builder of Brooklyn's new Beach-Haven Apartments, "the one that impresses me most is Servel's amazing record for *low* maintenance costs. Nothing ever seems to go wrong with them. There's no trouble with breakdowns . . . no worrying about repair bills. Just put them in, and you forget they're there."

Today, there are more than three million Servels in use throughout the world. Among these are many of the original models...still operating dependably after more than 20 years of service.

Here's the reason—Servel uses a *basically different* principle of refrigeration. A tiny gas flame does all the work instead of a motor. *Exclusive* with Servel, and years ahead, this unique freezing system does away with all moving parts. So there's no chance for mechanical breakdowns. No machinery to wear . . . no pistons, no valves, no pumps.

As a result, apartment and multiple-housing operators enjoy a minimum of trouble and expense year-in, year-out with Servel . . . and for *more* years, too. And tenants get the benefit of Servel's *silence* . . . always a strong selling point in renting. There's more you should know, so consult your Sweet's or write to Servel, Inc., Evansville 20, Ind.

***For example—**

Corpus Christi, Tex. "Our 750 Gas Refrigerators are 4 years old and cost less than 50¢ a year per unit to maintain."

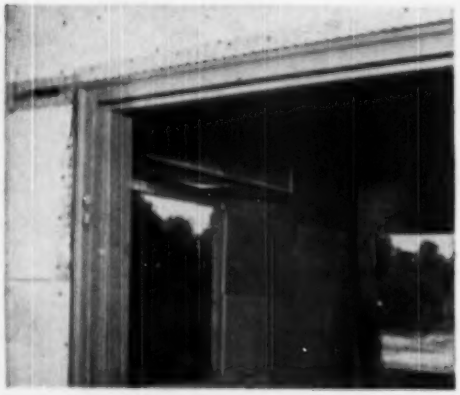
Mobile, Ala. "After nine years, our 200 Servels cost only 1¢ a month per unit for upkeep."

Los Angeles, Calif. "In 12 years our Servels have cost us nothing in repairs."

Here's that "WELL TAILORED LOOK" FOR YOUR DOORWAYS!

Richmond

WELDED STEEL FRAMES



You keep door frame erection time at a minimum by using Richmond welded steel frames with integral moulded trim. These strong, well-built units will help to lower your building costs because the frames are simple and easy to install.

Quality 18-gauge one-piece Richmond Frames are made up of three members—hinge jamb, lock jamb and head member having the corner mitered and securely welded. Hinges mortised and spot-welded to frame cannot work loose through usage. Universal brass strike plate is included with an enclosed dust box spot welded to frame. A red oxide primer is applied at factory.

Sturdy, Low Cost, Neat Appearing!

Tough, long lasting, good looking Richmond welded frames are weather resistant. Since moisture cannot penetrate, size will not change or swell. Frames can't warp or crack and there is no possibility of miters opening.

SEND COUPON TODAY

for full information about Richmond Steel Frames

The Richmond Fireproof Door Co., Dept. 5
P. O. Box 97, Friends Station
Richmond, Indiana

Please send me booklet giving full information about Richmond Steel Frames.

NAME

BUSINESS ADDRESS

CITY ZONE STATE

POSITION TYPE OF BUSINESS

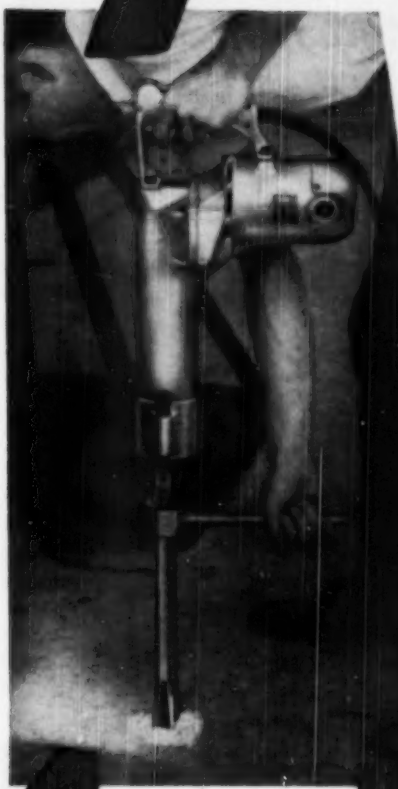
RICHMOND WELDED STEEL FRAMES
are your answer in helping to keep building costs in line!

THE Richmond FIREPROOF DOOR CO.

Kyrard

P.O. Box 97, Friends Station, Richmond, Indiana

7 ways to CUT CONSTRUCTION COSTS!



B & D "*Quick-Saws*"*, Hammers, give you MORE OUTPUT . . .

Per MAN Black & Decker QUICK-SAWS give you perfect balance, close-coupled design, reduced weight and length, comfortable "saw grip" switch handle, complete safety. B&D ELECTRIC HAMMERS are hard-hitting and amazingly husky, yet compact and light in weight. Result: your men can handle either tool more easily, with less fatigue; turn out more work every day.

Per HOUR Black & Decker QUICK-SAWS, powered by heavy-duty B&D-built universal motors specially built for tough sawing operations, are ten times faster than hand sawing. Black & Decker ELECTRIC HAMMERS deliver thousands of sharp, positive hammer blows per minute to make light work of many tough construction jobs.

Per TOOL These B&D Tools are *built to last*, give you *extra* years of heavy-duty service! Both tools are fully protected against dust and over-heating; have powerful motors, extra-tough gears, husky housings, all the extra strength and stamina built into *every* Black & Decker Tool!

WRITE TODAY for free, detailed catalog. See your nearby B&D Distributor for full details on Saws, Hammers, Drills, Impact Wrenches and many other time-saving, cost-cutting construction tools! The Black & Decker Mfg. Co. 666 Pennsylvania Ave., Towson 4, Md.

LEADING DISTRIBUTORS EVERYWHERE SELL

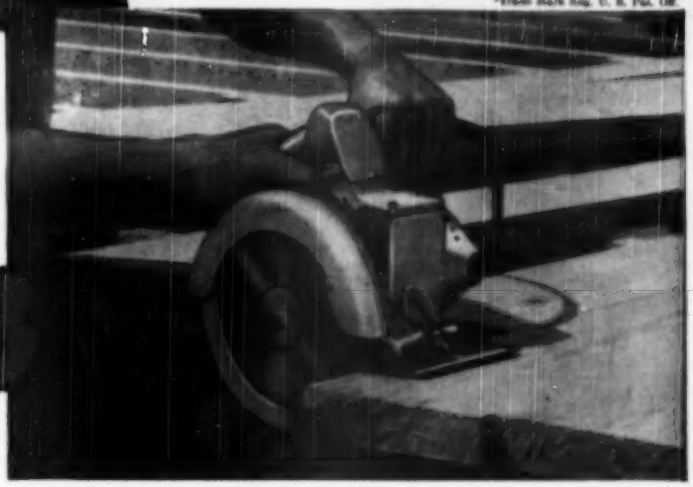
Black & Decker

PORTABLE ELECTRIC TOOLS

*Trade Mark Reg. U. S. Pat. Off.

4 **BLACK & DECKER ELECTRIC HAMMERS** *drive a wide variety of tools to drill or channel in brick, stone, concrete; chip, clean and scale metal; gouge, shape and notch timbers; seam and caulk; tamp and vibrate concrete forms; scuff concrete surfaces to remove form marks. Completely self-contained. Universal motors operate from any standard 110 or 220 volt power line or portable generator. Four models: rated by drilling capacity in concrete for ⅝", ¾", 1⅛", 2".*

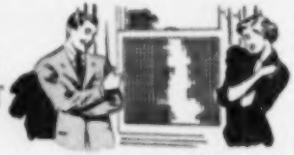
5 **BLACK & DECKER ELECTRIC QUICK-SAWS** *rip, crosscut, dado, angle groove—in wood, metal, stone, compositions. Quickly adjusted for angle or depth of cut. Easy to change blades and discs. Universal motors operate on any standard 110 or 220 volt power line or portable generator. Three models for cutting to depths of 2⅛", 2⅝", 3⅛".*



"A real advancement in window screening, easy to handle and install, and architecturally sound."

Harold Stauss, Sec'y
Harris Contr. Corp., Brooklyn, N. Y.

DURALL ALUMINUM TENSION SCREENS



Home owners and builders who know Durall are saying all the things you read above, and more!

With its first introduction, this remarkable new kind of window screen captured the imagination—and appealed to the good sense and pocketbooks—of home owners and builders alike. Over 2,000,000 are in use today!

FREE BOOKLET! Get our special, free Durall booklet, showing complete specifications and prices—for your files. Write today, Dept. AB-5. See Durall at your building supply dealer's.

West of the Rockies ask for Ry-Lock

and only
$3.75
for average size

Guaranteed by Good Housekeeping

DURALL
ALUMINUM TENSION SCREENS

NEW YORK WIRE CLOTH COMPANY · 445 PARK AVENUE, NEW YORK 22, N. Y.

NORMAN JOHNSON, *Architect*

ANDERSEN *Windowalls**

BREAKFAST WITH A VIEW is a daily pleasure in this dining nook, whose corner WINDOWALLS are formed by stock Andersen Casement Window Units.

These wood windows invite sunshine and fresh breezes to every meal—and all year long they also function as walls. They are more than windows, more than walls . . . they are WINDOWALLS. The wood of these windows lends beauty and color to both the room and the view, and in sub-zero weather, wood's insulating qualities are an added advantage.

Write for specification data or see Sweet's Architectural and Builders' Catalogs. Sold by millwork dealers.

The new Andersen WINDOWALL *Tracing Detail File will be sent on request to architects and designers at no charge.*

*TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation

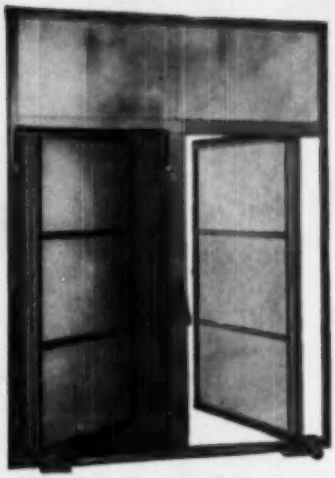
BAYPORT • MINNESOTA

STEEL Craft

REG. U.S. PAT. OFF.

A COMPLETE LINE OF

STEELCRAFT STEEL RESIDENCE CASEMENTS MADE OF HOT-ROLLED SECTIONS...BONDERIZED



Steelcraft now offers contractors and dealers a complete line of Steel Residence Casements, Utility and Basement windows . . . plus Steel Casings, Surrounds and Combination outside-inside trim.

Steelcraft Steel Residence Casements are made of heavy hot-rolled solid sections of uniform thickness, with butt welded mitred corners. Extra long reinforced hinges with bronze pins and washers provide ample clearance for safe and easy cleaning of the exterior of the glass from the inside. Sections are designed for maximum daylight. Heavy bronze finish roto or lever type hardware may be used for ease in operation of the ventilator. Screens and storm sash are easily attached to the inside of the frame. All casements are BONDERIZED and given a shop prime coat of paint baked on in accordance with Steelcraft Bonderizing specifications.

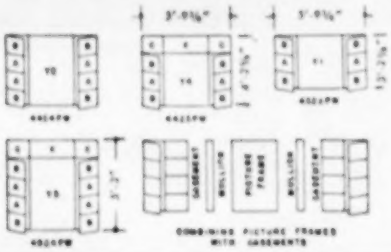
STEELCRAFT BONDERIZING SPECIFICATIONS

All building products shall receive the standard Steelcraft bonderized finish which includes a thorough cleaning by high pressure sprays of a hot alkaline solution and hot water, a uniform etch in bonderite chemicals, and painted with one coat of gray primer by the patented flow coat process to insure complete coverage, oven dried, and baked a minimum of twenty minutes at 300° F. To insure uniformity, this entire process of cleaning, bonderizing, prime paint, and oven drying shall be continuous and automatic without manual handling.

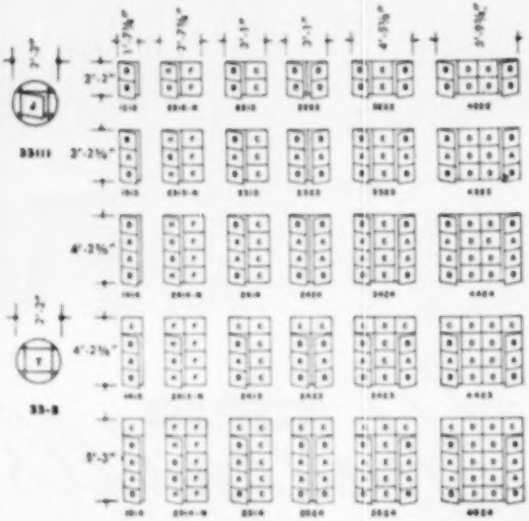
CHECK THESE 1950 FEATURES

- COMPLETE LINE
- HEAVY HOT-ROLLED STEEL SECTIONS
- NEWEST DEVELOPMENTS IN BONDERIZING
- CORNERS MITRED AND BUTT WELDED
- EXTRA HEAVY REINFORCED HINGES
- AMAZINGLY LOW PRICED

All Sizes and Types of Picture Frames, Windows and Combinations.



TYPES AND SIZES



Note: Also available in fixed lights for all of the above sizes.

DETAILS OF HOT-ROLLED SECTIONS

½ actual size

1. Inner and Outer Sections

2. Meeting Rail

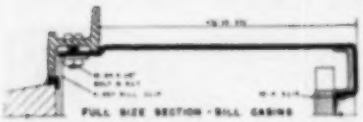
3. Transom Bar

THE STEELCRAFT MANUFACTURING COMPANY

STEEL RESIDENCE CASEMENTS

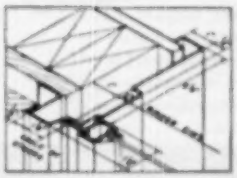
BASEMENT AND UTILITY WINDOWS

INTERIOR STEEL CASING

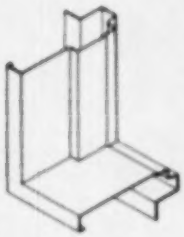


Steelcraft steel casings are ideal for all types of wall construction. They are easily installed at a minimum cost . . . the casing, consisting of head, jamb, and sill members, eliminates plaster returns, stools and trim. Steelcraft steel casings are BONDERIZED and painted with a baked on prime coat of paint in accordance with Steelcraft Bonderizing specifications. Excellent finish for finish coats of paint. They are fire-resistant and cannot warp, shrink, or crack. Shipped knocked down for assembly in the field. Easily stocked and available in all types and sizes for Residence Steel Casements.

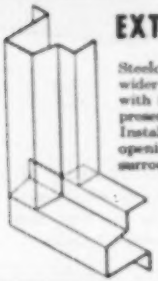
COMBINATION STEEL OUTSIDE-INSIDE TRIM



This one-piece outside-inside surround is installed at a fraction of the normal time required for multiple trim and casing. It also saves on initial and maintenance costs. This unit eliminates plaster returns, stools and trim. In dry wall construction, the wall material is slipped under the surround, eliminating any additional trim. They provide a neat and attractive trim for any type of building. Made of galvanized steel and welded into a complete one-piece unit, they are BONDERIZED and given a shop prime coat of paint baked on in accordance with Steelcraft Bonderizing specifications.



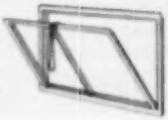
EXTERIOR STEEL SURROUND

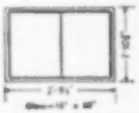


Steelcraft steel surrounds are recommended wherever wider and moulded frame appearance is desired. Designed with identical contours and ends accurately coped they present neat corners and joints in the assembly. Installation is simple since they are nailed to the rough opening. The casement is then easily attached to the surround with self tapping screws. Made of galvanized steel, they are BONDERIZED and given a shop coat of paint baked on in accordance with Steelcraft Bonderizing specifications.

STEEL BASEMENT WINDOW

Steelcraft tilt-in type steel basement windows are made of hot-rolled casement window sections, which provide double weathering contact throughout. Armless ventilators provide absolute trouble free operation and are easily removed for cleaning. Positive handle locks sash tight against frame. Screens are easily attached to the outside of the window with special clips. They are BONDERIZED and given a shop prime coat of paint baked on in accordance with Steelcraft Bonderizing specifications.





STEEL UTILITY WINDOW

Steelcraft steel utility windows are designed for use in stock barns, basements, shops and garages. They are made of hot-rolled casement window sections providing continuous double weathering contact. Tilt-in type armless ventilators can be easily removed. Draft guards for sides of windows can be furnished. Screens are easily attached on the outside. They are BONDERIZED and given a shop prime coat of paint baked on in accordance with Steelcraft Bonderizing specifications.

FORMED STEEL LINTELS

Steelcraft formed steel lintels are used for any window or door opening in any type of construction. Available in a wide range of stock sizes. Continuous ribs greatly strengthen the heavy gauge steel, and provide an excellent base for brick and mortar. All lintels are BONDERIZED and given a shop prime coat of paint baked on in accordance with Steelcraft Bonderizing specifications.

Buy your complete window requirements from one source . . . write, wire or phone your order today!

Get our special selling plan now.

STEEL Craft

MAIL THIS COUPON TODAY

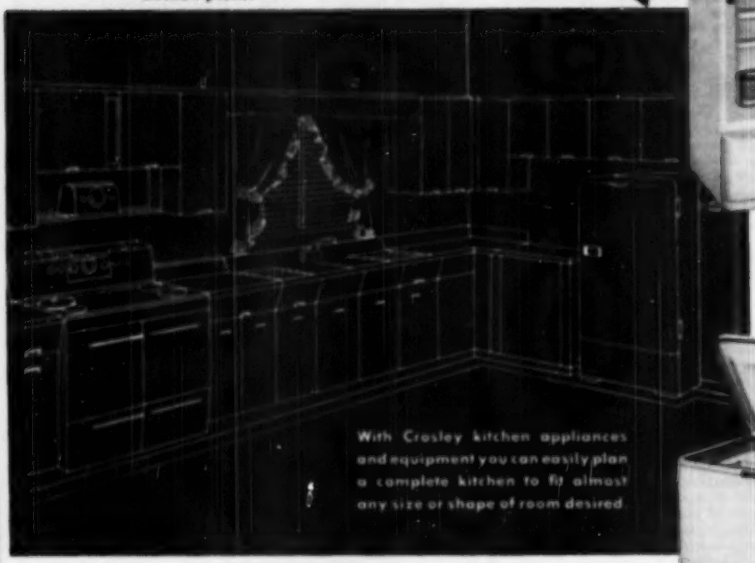
The Steelcraft Manufacturing Co.
9192 Blue Ash Road, Rossmoyne, Ohio (In Greater Cincinnati)
Please send me full information on
☐ Casements ☐ Basement ☐ Utility Windows
☐ Steel Casings, Surrounds ☐ Formed Steel Lintels

Name _____
Company _____
Address _____
City _____ Zone _____ State _____
My Position _____ Type of Business _____

ROSSMOYNE, OHIO NEAR CINCINNATI

For better

8 HANDSOME CROSLEY ELECTRIC RANGES (including 2 apartment-size models) with 33 different selling features that add extra appeal to your kitchen plans.



With Crosley kitchen appliances and equipment you can easily plan a complete kitchen to fit almost any size or shape of room desired.

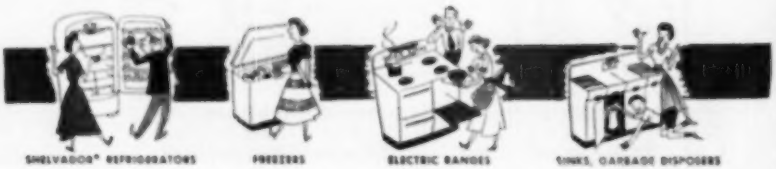
10 BEAUTIFUL SHELVADOR® REFRIGERATORS—all with recessed shelves in the door that double "front-row" space.

6 EFFICIENT HOME AND FARM FREEZERS from 4.1 to 20-cubic-foot capacity, with refrigerating compressor unit warranted for 5 full years.

CROSLEY

Crosley Division AVCO MANUFACTURING CORPORATION

Crosley—
Better Products for
Happier Living



business tomorrow...

BUILD WITH CROSLEY TODAY!

Whether you plan single- or multiple-unit dwellings, whether you want a single appliance, combination of appliances, or complete kitchen, you can do a better job with Crosley . . . Crosley kitchen products are versatile, modern, and beautiful—providing many *exclusive features* that help you develop your business reputation.

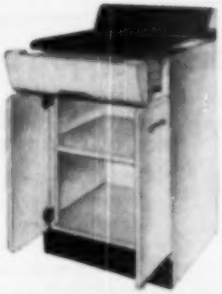
With Crosley you offer owners and tenants a whole new concept of *convenience* combined with *compactness* that conserves floor space, provides greater storage space, and saves steps.

7 MODERN KITCHEN CABINET SINKS with cabinets of all-steel welded construction and one-piece heavy-duty steel tops.

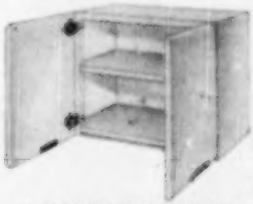
26 ROUND ELECTRIC WATER HEATERS in Custom and De Luxe Models ranging from 12 to 82 gallons in capacity.

8 TABLE-TOP ELECTRIC WATER HEATERS in 30- and 40-gallon Custom and De Luxe Models.

THE CROSLEY ELECTRIC GARBAGE DISPOSER—can't jam or clog! Designed to fit practically all standard sinks.



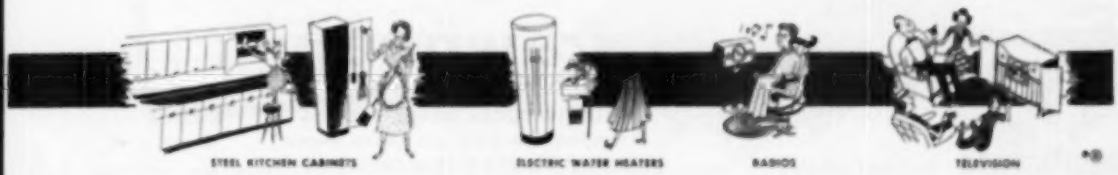
ATTRACTIVE KITCHEN BASE CABINETS at convenient working height, with heavy-duty linoleum tops and continuous back-splash guards.

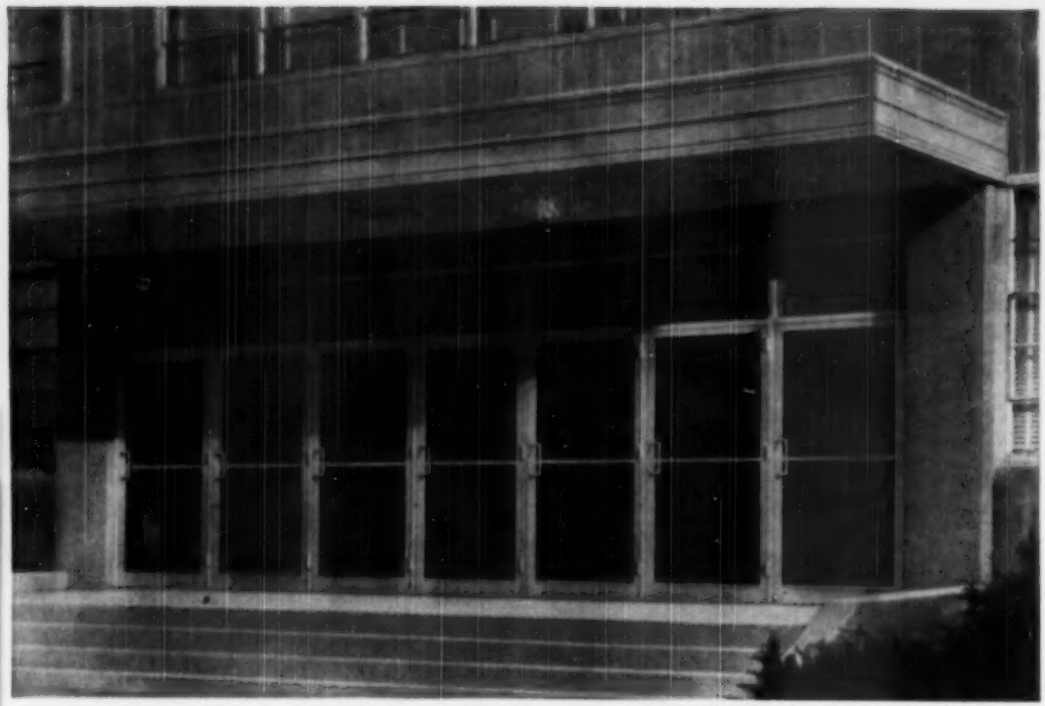


DURABLE KITCHEN WALL CABINETS of heavy-gauge welded-steel construction, with baked enamel finish to match Crosley kitchen appliances.

New Crosley Builders' Plan! Special data and service are available free to all builders and architects. For information write:

National Builder Sales, Crosley Division
Avco Manufacturing Corporation
1329 Arlington Street, Cincinnati 25, Ohio





Endicott Johnson Shoe Co. Recreation Center in Endicott, N. Y.
A. T. Lacey & Son, Architects, Binghamton, N. Y.

Kawneer Stock Entrances meet

EVERY building requirement—AND REDUCE COSTS

FOR STORES, SHOPS, RESTAURANTS, THEATRES, SCHOOLS, HOSPITALS, HOTELS, OFFICE BUILDINGS, FACTORIES, ETC.

No other entrances in the industry offer as many important advantages as Kawneer Stock Units.

Expertly engineered for smooth, long-term operation, these handsome, modern-styled Entrances were formerly available only as specially made units. They are now carried in stock, completely assembled and ready for quick installation. Factory delays and complicated installation problems are eliminated.

Kawneer metal-and-glass construction minimizes the possibility of breakage and the danger of people colliding with doors. Precision fitting protects interiors against damaging soot and dust. It also cuts heating and air conditioning bills by reducing the loss of warmed air in winter and cooled air in summer.

To find out more about these outstanding Entrances, write 228 N. Front St., Niles, Mich.; or 2588 8th St., Berkeley, California.

THE
Kawneer
COMPANY

ARCHITECTURAL METAL PRODUCTS

Store Front Metals • Aluminum Roll-Type Awnings
Modern Entrances • Aluminum Facing Materials

Get More Value!

Build better and faster—and at less cost with an all-purpose

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Let one machine do the work of *many!* That's the way to compete profitably in today's building market.

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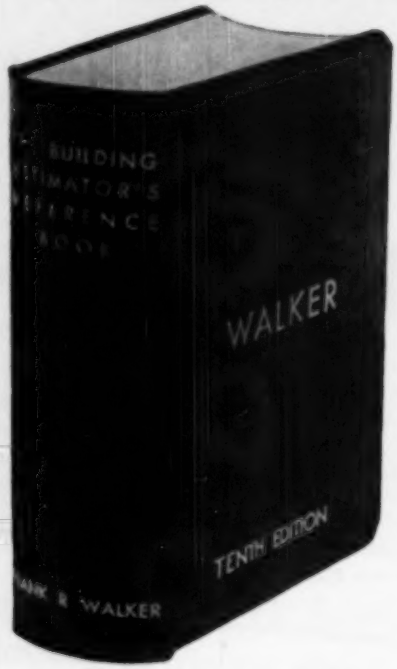

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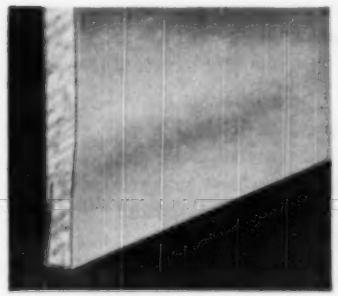

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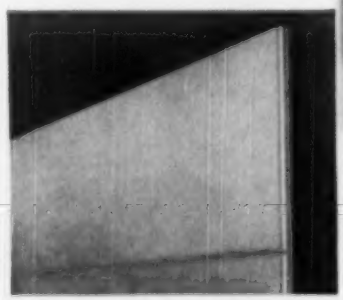

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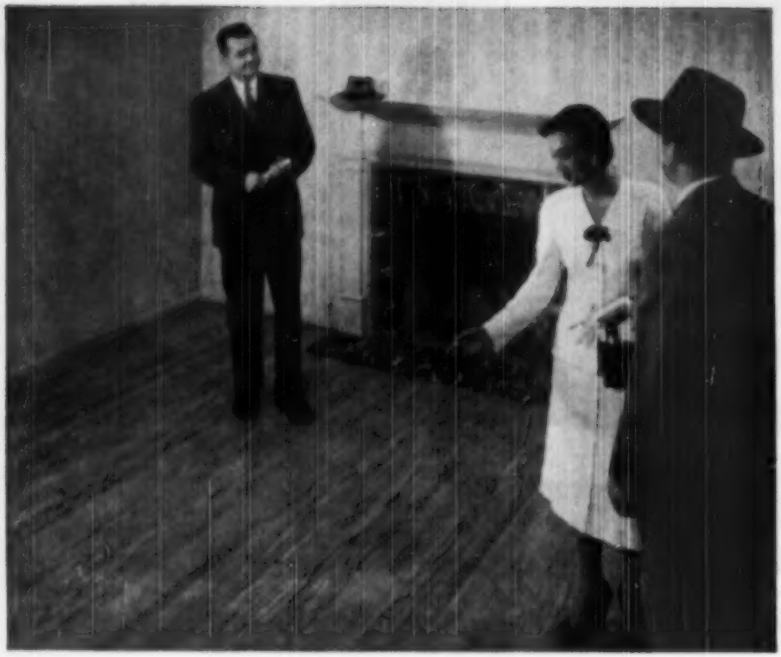

"THE LOOK THAT SELLS"

"I anxiously wait until I see that first look on my prospect's face as she enters the door of one of my houses. I know if she is pleased with what she sees first, the first step to a sale is made.

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TRENDS in the Building Field

Increased Mortgage Competition Developing

THE nation completed the most spectacular winter home building season in its history in February when 80,000 new non-farm dwellings were started. Starts for January and February were 59 per cent above last year. Apartment building has been showing a big increase, but, nevertheless, construction of new one-family houses is at a record high. About 790,000 single-family houses were begun last year, up 3 per cent from 1948 when the previous record was established.

Apprehension is felt in some quarters about the rising mortgage debt. In 1949 the volume of home mortgage debt rose to a new high of approximately $38 billion. This is about double the amount outstanding in 1939.

Nevertheless, there is now increased mortgage competition and somewhat lower interest rates on mortgage loans. This is the result of the large volume of savings coming into the market, the decline in yields on high grade bonds and the resultant desire of some institutions to switch funds from bonds to mortgages, and the fact that pension and trust funds are growing rapidly and are being invested in home mortgage loans.

How long this trend toward lower mortgage rates will continue depends, in the opinion of the United States savings and Loan League, on a continuation of a heavy volume of residential construction, the rate at which people save money, and the Federal Government's monetary policies.

More and more conventional loans are being made at rates of 4 per cent and 4½ per cent. Nearly all types of lending institutions are making more GI loans and holding them rather than selling them to the Federal National Mortgage Association. The GI 4 per cent rate is looking more and more attractive to institutional investors. Lending institutions have developed very satisfactory working relationships with the offices of the Veterans Administration, and legal questions which prevented some large investors from making GI loans in 1948 and the early months of 1949 have been ironed out.

By the close of 1949 a total of 1,662,867 veterans of World War II (about one out of ten) had purchased homes through the aid of G.I. loans. Of these 1,367,980 have made straight 4 per cent G.I. loans and 254,887 have made construction FHA GI loans. The Federal National Mortgage Association has purchased less than 5 per cent of these loans.

How well builders are serving veterans is shown by statistics on veterans loans for September, October and November, 1949. Forty per cent of the loans made during the period were for the purchase of new houses, 20 per cent for proposed new construction, and 40 per cent for the purchase of existing houses.

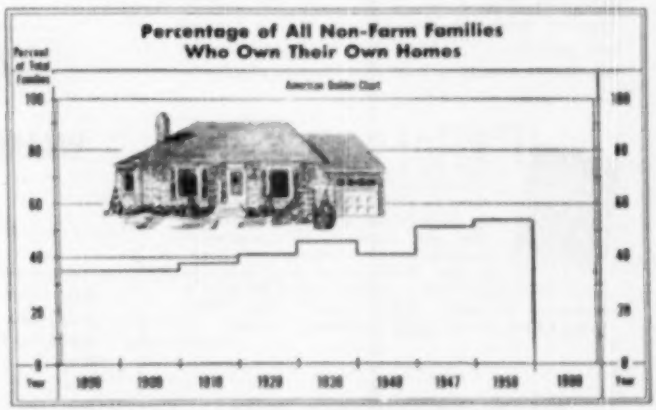
Fifteen per cent of the new houses purchased by veterans cost less than $7,000, 55 per cent cost between $7,000 and $10,000, and 30 per cent cost over $10,000. Average purchase price would be about $9,000. With construction costs and other living costs about double prewar, this is equivalent to a house at less than $5,000 in 1939, and a vastly improved house in many respects.

During the fifties it appears that financing terms will continue to be relatively favorable for borrowers and a growing volume of homes will be financed by institutional lenders. On the basis of postwar trends, savings associations may be expected to gain importance in the field of home financing.

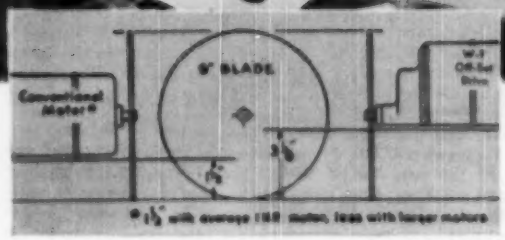
Out of 2,500,000 home mortgages of $20,000 or less made in 1949, about 31 per cent were made by savings and loan associations, 6 per cent by insurance companies, 20 per cent by commercial banks, 5 per cent by mutual savings banks, 23 per cent by individuals, and 14 per cent by all other mortgages.

Title III housing applications providing for low-rent public housing have poured in at PHA despite record-breaking construction of new privately financed houses.

Applications received and tabulated to date provide for 398,165 dwelling units. Cooperation agreements with local governments providing for tax exemptions have been approved by PHA for 59,410 of the dwelling units. A total of $35.7 million in preliminary loans have been authorized and $19.8 million executed.



Source: United States Savings and Loan League



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On and Off the Record

News, Views and Comments

RENT CONTROLS—They were scored by Cornelius Teninga, Chicago home builder, recently when he declared that rental apartment shortages in Chicago are the result of artificially maintained rent control.

CITY TAXES—Teninga further stated that removal of rent control would result in increased rents, and therefore, increased assessments for real estate taxes. He declared that an increase of 36 per cent in rents would produce an additional tax revenue of $22,000,000.

SLUM CLEARANCE—Teninga asserted that every builder favors true slum clearance, but denies the need for public housing. Only 30,800 out of a total of 816,200 dwelling units in Chicago are in need of major repairs. Those statistics he declared to be a far better test of the need of slum clearance than descriptions of hardship cases within the slums.

MAKE UNITS AVAILABLE—Teninga said that 138,000 units out of the 816,200 would be made available if rents were decontrolled, and tenants occupied their dwelling units with the same intensity as is the case with home owners in Chicago.

PORTLAND, ORE.—The Portland Home Owners Council recently presented the mayor of the city with a request for a public hearing before the city council is asked to approve public housing and the tax set-up that would take effect when the houses are built.

TAX ISSUE—The home owners council proposes to block public housing in the city by persuading the city council to reject the tax agreement.

REFERENDUM—Failing in that, the home owners will ask that the matter be referred to the voters in November.

HOUSING VIOLATIONS—In New York the Citizens' Housing and Planning Council has announced an 8-point program to get correction of an estimated 250,000 housing violations. They affect health and safety.

SLUM CLEARANCE—This is the best way to effect slum clearance. In nearly every city in the nation there are already laws, which if enforced, would eliminate slums almost overnight. Added to that a little education of people who do not know how to live in houses would go far toward preventing slums.

DEMOLITION—Mere demolition of slum dwellings certainly is no prevention of future slums. The only way to prevent slums is to train people how to take care of dwelling units in which they live, and in the case of rental units—which most of them are—to enforce the law, and make owners conform. Nor is it necessary to demolish most slum dwellings to clear them. Again, it is chiefly a question of law enforcement and education.

MARTIN C. HUGGETT—In his statement to the City Council of Chicago on the public housing issue he said, "Picture the occupants of public housing. The management shovels his coal, cleans his walks, cuts his grass, paints his fence and then, to keep him from becoming flabby from lack of exercise, they build him a recreation building so that his leisure hours may be occupied, since he does not have either the problems or the incentive of the home owner. And who pays for all this? His hard working tax-paying neighbor across the way."

DELIBERATE OR STUPID?—A small group of men and women have gone far to sell the American public on the fallacy that work is done only by those who know no better, and that thrift is unnecessary self-denial. Whether this small group is stupid or vicious or both remains to be seen. But the ultimate result, if they get much farther is very clear. The result inevitably must be national bankruptcy.

GEORGE J. COLES—He is chairman of the Institute of Public Affairs in Victoria, Australia. Recently returning to his homeland from a tour of Great Britain and the United States, he wrote, "The contrast between the abundance and prosperity of free enterprise America and the desperate scarcity in Great Britain under a socialist administration is striking . . . free enterprise is a grand system capable of bringing immeasurably greater benefits to the mass of the people than any system of over-rigid socialist planning.

"I cannot emphasize too much the importance of the work of educating our own people in sounder economic thinking."

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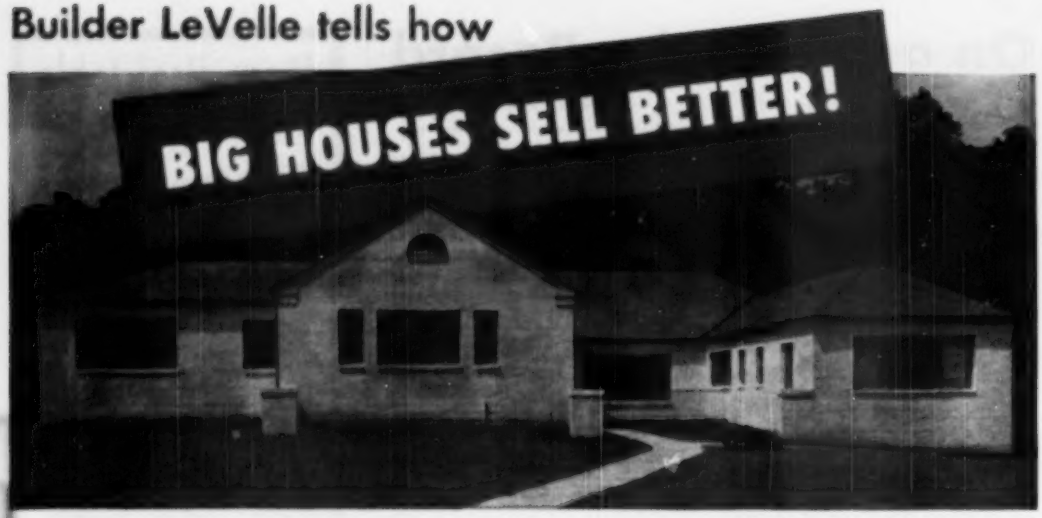
Builder LeVelle tells how



Each of these Capitol City Homes designed by architect Joseph J. Schlosser, has two or three bathrooms, three to five bedrooms, and a completely electric kitchen with a modern Electric Range. They're built on lots of ½ acre or more, and sell at from $52,000 to $45,000. According to Mr. LeVelle, electric living is a "must" in a large home. And according to leading builders everywhere, it's a "must" now in *any* size home.

"Electric equipment is what sells them, and the kitchens, of course, have Electric Ranges!"

Mr. Harry LeVelle builds houses in North Chevy Chase, Maryland, for people in the upper income brackets. "They rave about the electric equipment," he says, "including the modern Electric Ranges. 90% of my home sales are to women who love the all-electric kitchen. They want to work in such a kitchen, although you might think that the homemakers in such families would not be doing their own work."

Mr. LeVelle is convinced that the electric kitchen is his greatest sales factor. Note among the appliances that help the homemaker to achieve gracious living, the modern, automatic range, and—OF COURSE . . . IT'S *ELECTRIC!*

EQUIP YOUR HOUSES WITH **ELECTRIC RANGES**

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EDITORS'

Round Table

A CHICAGO COUPLE recently contracted for the remodeling of the kitchen in the house they have lived in for the past 25 years.

A KITCHEN remodeling contractor was engaged to develop the plans for the new layout, and to do the work. Ten days saw the entire job done, and a Saturday evening saw the couple preparing their first dinner in the new kitchen. The job took them hours, and half way through what had developed into an ordeal for them they both took time out to consider if there might be a way to restore the old kitchen and the old equipment.

THE REASON is that the modern sink, the gleaming new cabinets, and the unfamiliar storage space for utensils, dishes and supplies caused many unlooked for delays.

AFTER THE MEAL the lady of the house moved, as usual to soak a large broiling grid. But when she tried to get it into one of the two compartments of the new sink she couldn't do it.

"WHAT," she asked, "do I do now? Is it going to be necessary to scrap this grid, and get a smaller one just because the new sink provides no room for cleaning it?"

THEY BOTH took time out again to consider this calamity, and another one which had to do with a can opener which had been mounted on the wall. There was no place that either of them could find in the new kitchen for the can opener. Obviously, some major changes were going to have to be made in living habits and the use of equipment. Was there a way to clean that grid without soaking it or would they have to get another grid? Would they have to give up the convenience of that wall-mounted can opener, or was there something they didn't know about that would do just as well?

MINOR IRRITATIONS included the age-old habit, a carry-over from their youthful days on a farm, of having a dipper or cup hanging near the faucet for drinking purposes. There was no place to hang the dipper or cup in the new set-up.

IMMEDIATE REACTION is that both must be congenital objectors who despise change even if it is good change.

MAYBE SO, but if they are, they are not typical of most people in their

(*Continued on page 57*)

New! Different!

Fleetlite

THE ONLY COMPLETE ALUMINUM WINDOW

Startlingly different — an entirely new conception — Fleetlite is the window you have been demanding for years. Engineered and built as a complete packaged window, Fleetlite provides frame, sash, storm sash and screen as an integral unit, easily installed at one time. Home owners like the self-storing *convenience* of FLEETLITE — its *economy*, its *beauty*, its *permanence*. Already installed in thousands of homes throughout U. S. and Canada.

"What people are looking for," says Builder.

Gentlemen:

Enclosed is an order for Fleetlite windows for an additional group of homes which I am starting in the early spring.

After using your windows in all of my building during 1949, I can truthfully say that the fact that I was featuring your windows accounted for a ready market for my homes and advance orders extending into 1950.

It may interest you to know that recently I had one of these houses open for inspection for one day, and at that time, rush orders for twelve additional homes, all to be equipped with your windows. As a result I am convinced that the new design features of Fleetlite Windows are what people are looking for even in low-cost homes, and I am therefore planning on using your products exclusively during the coming year.

Many thanks for your good cooperation and prompt service.

Write today for full details or see your dealer/builder.

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AMERICA'S finest WINDOW
112 PEARL STREET BUFFALO, N. Y.

With this advertisement in *Better Homes and Gardens*

Westinghouse

invites 3,000,000 families

to visit YOUR MODEL HOMES DURING NATIONAL HOME WEEK

The full-page advertisement below, to appear in Better Homes and Gardens in September, invites its readers . . . 3,000,000 of America's best families . . . to visit model homes . . . especially those planned and equipped electrically and identified by the Westinghouse job sign—a sign of quality.

Use the Westinghouse 3-Point Plan to help make your homes more *salable* by including *planned electrical* features. The plan includes a free promotion package.

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Ask for FREE BOOKS

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Please send me your 3-Point Plan Book and your Book of Ideas—B-4601.

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EDITORS'

Round Table

(*Continued from page 57*)

middle fifties. Because while most couples in their middle fifties have been living according to well defined patterns for a long time, even though many of the patterns may be outmoded, inefficient, and possibly unsanitary, they are not opposed to change.

AND THEY DO represent the age bracket which is the most fruitful as prospects for remodeling of all kinds.

NOW, THIS is no attempt to prove or imply that kitchen remodeling or any other kind of remodeling is bad in that it disturbs older people.

IT DOES, HOWEVER, point to one possibility as a condition to tapping the vast remodeling market. It suggests for consideration that a remodeling project or plan is entitled to the same kind of investigation of personal living patterns as that employed by any good designer of custom built houses before plan and design are determined.

THERE IS EVEN less point in remodeling an old house that people have lived in for several decades, without thorough knowledge of their living habits than there is in designing a new house without that information.

THE KITCHEN remodeling firm who designed and executed the remodeling job in question came up with an excellent plan to cope with a bad physical condition, and their work leaves nothing to be desired.

BUT, because they failed to consider what to them were points not worth considering, the owner feels now, even with his new range, refrigerator and wall cabinets, that he has spent about two thousand dollars, with the net result that he has a kitchen not nearly as satisfactory as the old one.

THE CONTRACTOR will get no new business because of the job due to the fact that his customers, while granting that the workmanship is excellent, feel unhappy, and are not loath to say so.

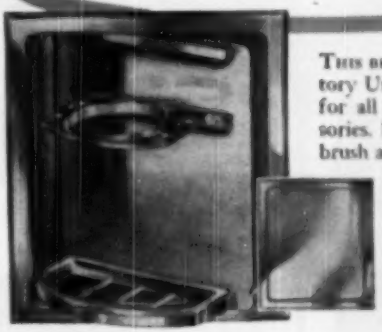
HAD THE CONTRACTOR spent a little more time looking around the original layout and asking a few more questions he could have accommodated the little foibles peculiar to this couple, or he could have suggested new procedures to put into operation with the new design and layout.

(*Continued on page 61*)

There's something **SPECIAL** *about bathrooms when accessories are* HALL-MACK

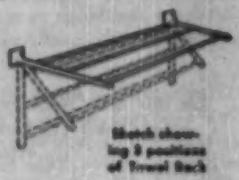
*TRADE MARK REG. U. S. PAT. OFF.

In Hall-Mack's complete selection of bathroom accessories you'll find unique *special* accessories like these—made to add the final touch of convenience and appearance to any bathroom . . .



THIS BEAUTIFUL Concealed Lavatory Unit is a perfect companion for all other Hall-Mack Accessories. Soap, tumbler and toothbrush are ready at the touch of a finger—yet smartly concealed when not in use. These bathroom necessities are mounted on a revolving panel, and only a polished chrome surface flush with the bathroom wall is visible when the unit is closed . . .

AND HERE IS a three-bar Adjustable Towel Rack—a real space-saver. It's instantly adjusted to any of three positions (horizontal, 45°, or down) and is ideal for drying hosiery, for displaying guest towels, and for bath towel storage. Drops down out of the way when not in use, yet provides so much *extra* convenience when needed.



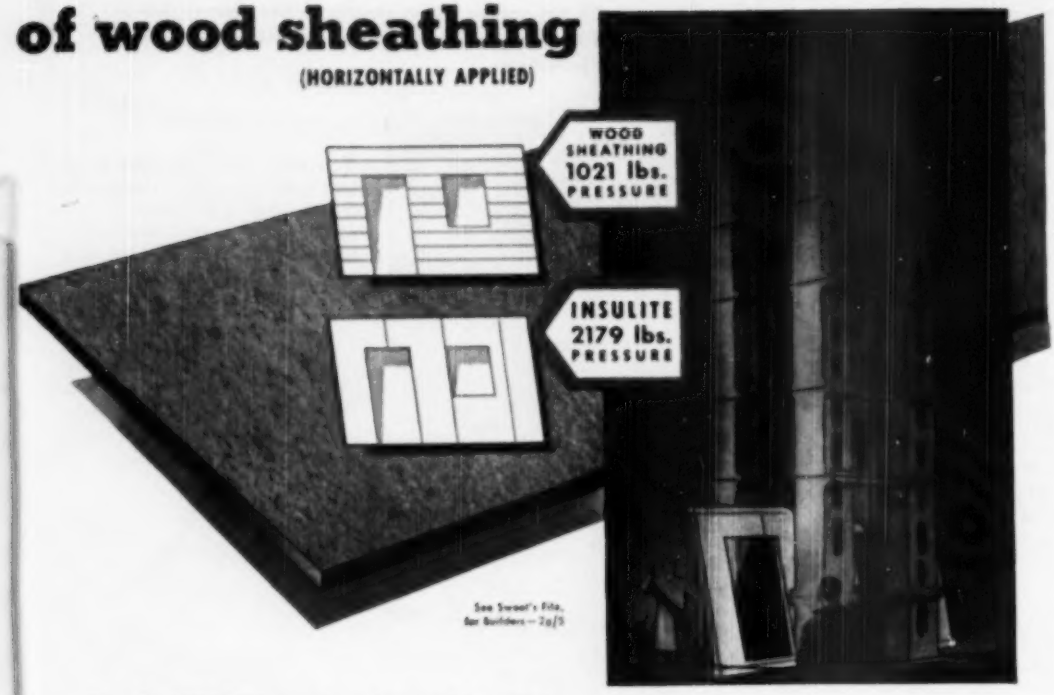
Sketch showing 3 positions of Towel Rack

LOOK FOR *all* of the extra qualities in bathroom accessories—*and you'll choose Hall-Mack!* Remember—there is a complete line to give you the right accessories for every bathroom need. Hall-Mack also makes a full selection of fine Medicine Cabinets and other recessed specialties. Write for details. Hall-Mack Company, 1144 W. Washington Blvd., Los Angeles 7, California.

HALL-MACK *Quality* ACCESSORIES *for every Bathroom Style and Budget*

Insulite* Bildrite Sheathing has Twice the Bracing Strength of wood sheathing

(HORIZONTALLY APPLIED)



See Sweet's File, for Builders—2g/5

Let this MILLION pound testing machine tell the story. The event took place in a nationally known experimental research laboratory.

The purpose was to compare the relative bracing strength of Bildrite Sheathing and ordinary wood sheathing in full size walls of standard framing.

These facts are important because lack of proper rigidity in a wall can cause plenty of grief and trouble . . . doors that sag, windows that stick . . . plaster cracks, warped floors. So a good wall must assure adequate bracing strength.

The sections tested were equal in size, 9'x 14', large enough to constitute one wall of a full-sized room. Procedure consisted of applying pressure laterally until distortion would cause plaster cracks, sagging doors, etc. When the machine was set into action, it reproduced in effect the pressure of storms up to and beyond hurricane force.

THE TEST TOLD THE STORY!

HERE ARE THE RESULTS:

At 1,021 pounds, the panel sheathed with wood had sagged far enough to cause plaster cracks, jammed windows, sagging doors, etc.

But at the same figure, the panel sheathed with INSULITE resisted well within the safety margin! Not until 2,179 pounds of pressure was applied did the INSULITE panel sag as far as the wood panel at half that pressure. Bildrite sheathing provides TWICE the bracing strength of wood sheathing horizontally applied!

*Reg. U. S. T. M.

INSULITE DIVISION MINNESOTA AND ONTARIO PAPER COMPANY
MINNEAPOLIS 2, MINNESOTA

S-50

Avoid costly errors with this . . .

NEW UNIVERSAL Level Transit

Price $165.00 complete with tripod

Now David White offers you, *at the lowest price anywhere*, the finest of Universal Level Transits with 4½" protected arc, internal focusing and coated optics.

Don't wait if you're in the market for a new all-round practical builder's instrument — see the improved new David White Model 3000 Universal Level Transit now.

You'll find this instrument properly used will be your best insurance against costly layout and building errors. The new 4½" protected arc means easier, more accurate readings, less likelihood of instrument damage through accident. Internal focusing assures you of dust and dirt-free inside lens surfaces, better protection for optical parts and mechanism. Coated optics mean clearer, distortion-free images, sharper definition, positive readings at greater distances and under adverse conditions. Instrument spindle supported on ball bearings for perfect horizontal adjustments.

Ask your nearest dealer to give you complete information on this and other fine engineering instruments. Or write direct to David White Co., 311 W. Court St., Milwaukee, Wis.

We offer complete, prompt repair service on all makes of instruments — levels, transits, theodolites, etc.

DAVID WHITE COMPANY

EDITORS'

Round Table

(*Continued from page 59*)

THAT LEADS up to the acceptance by buyers of new homes of radical changes from the traditional in both design and layout.

SHELTER GROUP magazines and the heads of departments of schools of architecture in some colleges and universities frequently complain that the home builders resist modern design features that offer better living.

THE COMPLAINT is not justified. It is not the builders who resist. Resistance stems from two quarters. One of them is the financing institutions, most of whom look upon modernistic design and radical departure from the traditional with a fishy eye. They are unwilling to risk large-percentage mortgages on design that is not fairly consistent with what prevails in a given locality.

THEIR REASON for resisting is not without grounds. They know that the prevailing preference is for something generally following the pattern of the houses in which the home-buying couple have been reared. Often, in the case of young couples who prefer modernism in design and layout the bank hesitates or insists upon major changes, with the idea that the house may come back to them and that quick re-sale will be highly important both in the interest of the lending institution and the defaulting buyer. There is a better chance for quick re-sale, they reason, with a fairly traditional house than with a highly modernistic one.

THESE CONSIDERATIONS are based on the fact that living patterns are deeply ingrained, and that generally they do not change in the span of one or two generations.

THE OPERATIVE BUILDER, who must risk capital and time on new construction, and gamble that what he produces will find ready sale, must be as certain as he possibly can that what he produces will meet public approval. He cannot afford to nor is he justified in taking long shots with his own money and the money of the lending institution.

IT ISN'T the builder who quarrels with development of new planning and styling. He can go just as far as the proponents of development can educate the public to accept that development.

W. G. GOUGH knows what sells...and it takes ADEQUATE WIRING

W. G. Gough, well-known Sacramento Builder, says: "By including certified Adequate Wiring in my homes I am assuring my home buyers of electrical satisfaction today and tomorrow, and myself of today's and tomorrow's business."

Houses sell faster when they're planned for electrical living. Here's why:

Millions spent in appliance advertising have convinced prospective home purchasers that electrical living is for them.

Make the wiring a selling point. You must wire anyway. Adequate Wiring is one of the least costly "plus values" you can add to clinch sales and outsmart less acute competitors.

Use this selling tool. For Adequate Wiring information and other sales help,

Just use the handy coupon.

Selling's Less Tiring With Adequate Wiring

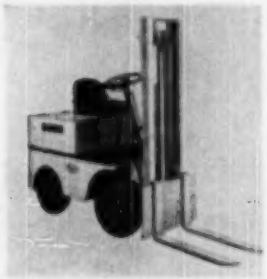
National Adequate Wiring Bureau
Department A5
155 East 44th Street, New York 17, N. Y.

Please put me in touch with the nearest local Adequate Wiring Bureau. I'm interested in giving my houses more sales appeal.

NAME.....
COMPANY.....
ADDRESS.....
CITY.....STATE.....

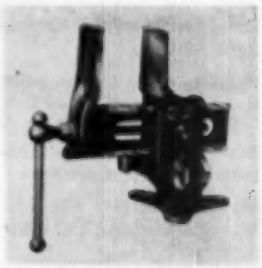
NEW PRODUCTS
Offered by Manufacturers

FORK LIFT TRUCKS **AB55011**
Models FA-20-24 and FPA-20-24 fork lift trucks with 2220 and 2600 pound capacity are rated at a 24-inch load center. Standard mast of new truck has collapsed height of 64½ inches with



an 85-inch lift. Two speed forward and two speed reverse transmission, single hydraulic tilt-raise-lower control lever, and gear shift levers mounted on steering column. Design changes include new steering axle, solid carriage plate, larger diameter steering tires, and interchangeable masts. The Budd Co., Dept. AB, Harvey, Ill.

WOODWORKING VISE **AB55023**
Woodworking vise, the "Versa-Vise," can be placed on its steel post-type base for use in right or left horizontal, as well as vertical position, and be turned to the most convenient di-

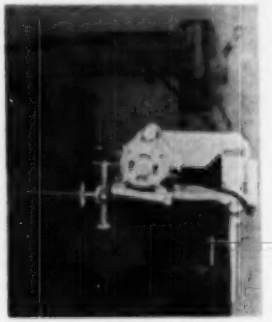


rection for the job to be done. Locks in position on base automatically when jaws are tightened upon object to be held. Widest capacity is five inches and vise can be used effectively on material of any thickness up to 5-inch maximum. Made of cast semi-steel. Weight, 16 pounds. Holding surfaces are 2½ inches wide by 3½ inches deep. The Will-Burt Co., Dept. AB, Orrville, Ohio.

HOUSE-MOVING TRAILER **AB55013**
Super-Hauler, no. 246347, offers safe means for rapidly moving houses, or large and awkward equipment components. Operates similar to ordinary full trailer. Main frame girders are separate units and are easily placed in any desired position under a house, after clearance is provided. Flexibility of assembly permits structure to be amply supported at critical weighted point. Once placed under a load, complete frame and burden are raised in a single effort.

When raised, adjustable pneumatic-tired wheels are placed in position. Schwette Builders Co., Dept. AB, Wausau, Wis.

RIP FEED ATTACHMENT **AB55021**
Power rip feed attachment for radial arm saw may be attached quickly and securely with two mounting brackets supplied with unit. Design of unit enables operator of saw to use it for straight rip sawing and for bevel ripping, mold-

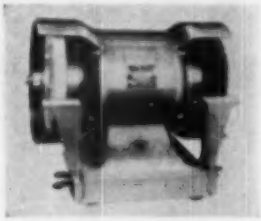


ing, power feed shaping, ploughing, grooving and rabbeting. Unit may be moved quickly out of the way when power feed work is completed. Hand operations may be resumed without delay. Equipped with adjustable feed rollers for feeding material into cutter and taking cut material away. Attachment fits most radial saws. DeWalt, Inc., Dept. AB, 13 Fountain Ave., Lancaster, Pa.

WOOD AUGER BITS **AB55007**
Wood auger bits for use with electric drills are available in 13 sizes from ¼ inch to 1 inch. Also packed in two handy sets of 6 and 13

bits each. Suitable for all industrial uses and ideal for carpenters, contractors. Made of chrome alloy steel, accurately hammer forged. Accurately centered by precision machinery. Mirror bright finish. The Midway Tool Co., Inc., Dept. AB, Melvin, Ohio.

BENCH GRINDER **AB55009**
Six-inch "Home-Utility" electric bench grinder is powered by Black & Decker ¼ H.P. motor, and supplied with general purpose grinding wheel and wire wheel brush. Can be equipped with different grades of grinding wheels and with



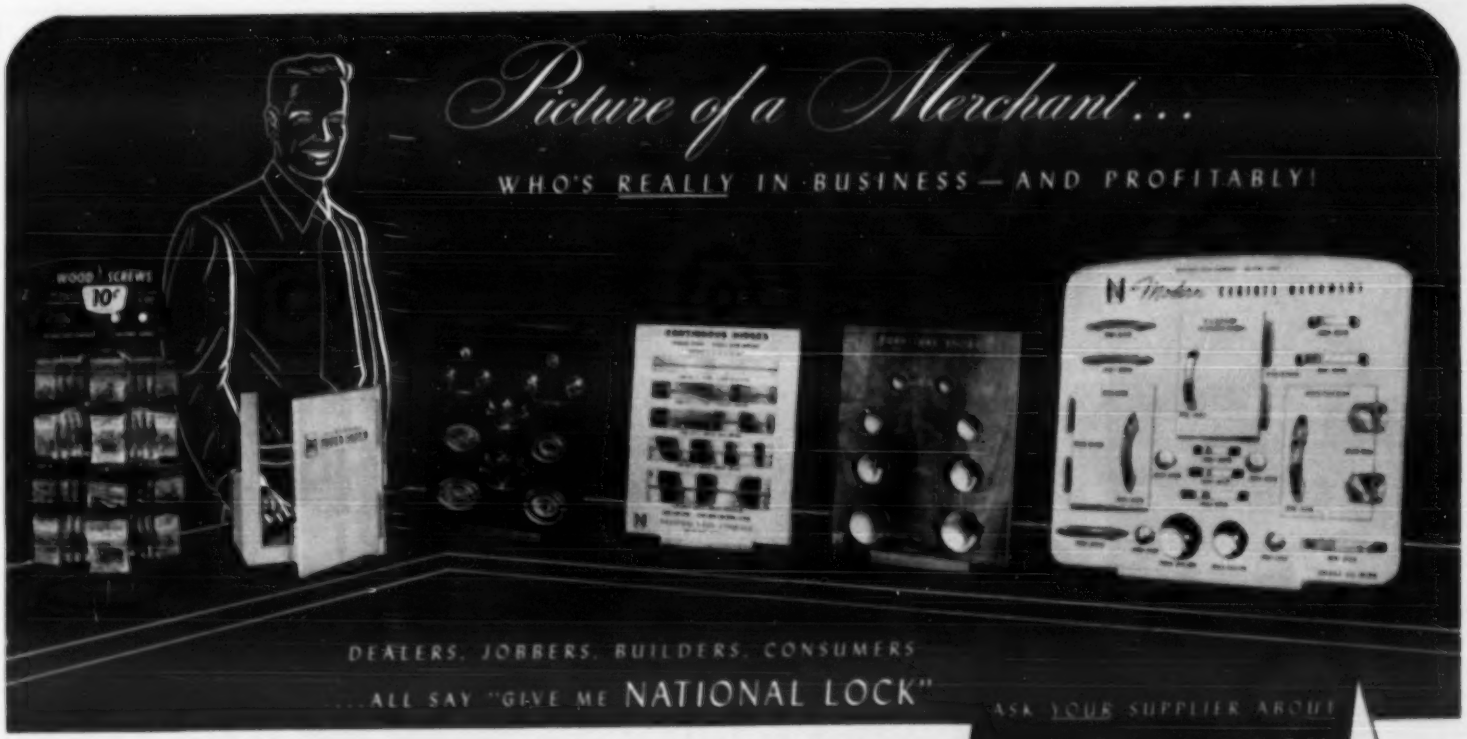
rag buff wheels for buffing and polishing. Adjustable tool rests, and wheel guards cast integral with motor housing to give ample protection. Rotor and wheel spindles mounted on full-size ball bearings covered by sleeves to protect them from dust and grit. Weight, 31½ pounds. The Black & Decker Mfg. Co., Dept. AB, Towson 4, Md.

BUCKET LOADER **AB55002**
Pneumatic-tired Model 543 bucket loader has a 15 M.P.H. road speed, and truck-type worm and roller for steering that allows easy maneuvering in cramped places. Economical for truck loading, the loader is ideal for aggregate producers and material yards. Two forward and two reverse speeds. Automatic load trimming. Barber-Greene Co., Dept. AB, Aurora, Ill.

HAND TRUCK **AB55036**
"Tricart," a lightweight tubular steel hand truck, has adjustable tripod support and leverage plate that makes loading easy. Weighing 17 pounds, the Tricart handles loads up to 600 pounds. Telescoping tripod is adjustable in-

stantly to any position for maximum ease of wheeling. Third wheel assembly can be folded completely out of the way, to permit use of truck as a two-wheeler when desired. Two models are available. Model A stands 45 inches high, has three rungs; Model B stands 52 inches high, has four rungs. Meloaz Manufacturing Co., Inc., Dept. AB, 4730 Avalon Blvd., Los Angeles, Calif.

(Continued on page 64)



Regardless of how you utilize NATIONAL LOCK merchandise, you're "in business" profitably. Dealers who take advantage of the popular appeal of NATIONAL LOCK products cash in on this widespread acceptance. Jobbers who feature NATIONAL LOCK know they're providing the very finest to their dealers. And these jobbers profit accordingly. Builders who count on NATIONAL LOCK hardware find it adds extra desirability in the minds of prospective home purchasers. So why don't you look to NATIONAL LOCK for the ultimate in an extensive line of outstanding hardware?

ASK YOUR SUPPLIER ABOUT

NATIONAL LOCK

- No. 77 Wood Screw Assortment
- No. N-150 Cabinet Hardware Assortment
- Extensive Line of Builders Hardware
- Fast-Moving National Tutch Latch
- Period Furniture Trim Assortment
- No. N-88 Lock Assortment
- Sash Hardware ... and Many Other Items

NATIONAL LOCK COMPANY ROCKFORD, ILLINOIS MERCHANT SALES DIVISION

DISTINCTIVE HARDWARE...ALL FROM 1 SOURCE

NEW PRODUCTS

(Continued from page 62)

LIFT TRUCK **AB55001**
Model 20, a 2,000-pound capacity lift truck, is powered by new Wisconsin air-cooled engine designed to withstand great extremes in weather conditions. Engine accessory improvements include larger automotive-type battery,

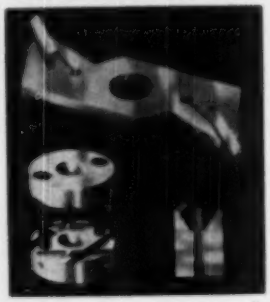
a re-designed muffler with spark arresting features, and larger gasoline tank to permit eight-hour work shifts without refilling. Uprights, lower in height than on the old 20, are now mounted on an extension of truck frame rather than to transmission case. Will pivot forward to lift front wheels clear of ground for changing tires or servicing power unit. Hyster Co., Dept. AB, 2902 N.E. Clackamas St., Portland 8, Ore.

LONG WEARING BLADES **AB55018**
Skil Carbolay-Tipped blades will cut lumber as long as 350 hours without resharpening. For use with 7¼-inch and larger Skil Saws only, blades are recommended for heavy duty gang cutting of all lumber and for accurate cutting of such materials as Celotex board, Asbestos cement board and Insulbrick. Available in 7-inch diameter with 18 teeth and 8-inch diameter with 20 teeth. Skilsaw, Inc., Dept. AB, 5033 Elston, Chicago, Ill.

POWER SHOVEL **AB55010**
Hydraulically-operated "Scoop-Shovel" eliminates manual shoveling when scooping, lifting, moving, and dumping sand, coal, gravel, or other materials. Scoop-Shovel accessory is attached easily to the Lift King and Worksaver

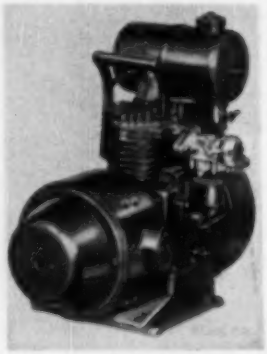
electric and gas fork trucks. Handles up to 27 cubic feet of material. Tilts upwards from horizontal scooping position to cradle load during transport, and tilts downward to discharge load when dumping. Scoops at ground level or digs into piled material. Dumps at heights up to 130 inches. The Yale & Towne Manufacturing Co., Philadelphia Div., Dept. AB, Roosevelt Blvd., Philadelphia 15, Pa.

ACCESSORY TOOLS **AB55020**
Production tools for dadoing, grooving and shaping wood include a dado and saw-shaper head, one 7 inches in diameter by ½ inches thick for light work, one 7 inches in diameter by ¼-inch-thick for heavy work, and one 9 inches by ⅛ for radial type saws. The first two are for table saws. The heads are cadmium plated; offered in standard arbor hole sizes from ⅝ to 1¼ inches. New type safety shaper



collars in 2¼ and 3-inch diameter are also offered. Jet Tool Sales, Dept. AB, P.O. Box 217, Point Loma Station, San Diego 6, Calif.

ELECTRIC PLANTS **AB55019**
Electric plants for use as a sole source of current in places not reached by central station service, provide portable power for many kinds of jobs, or current for stand-by or emergency



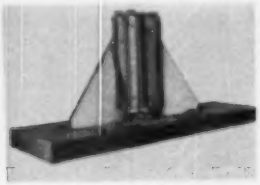
uses. Equipped with carrying handles, the 350-watt plant weighs 70 pounds. Can be transported in trunk of a car. A larger model for portable and semi-portable uses is available. This plant, 750 watt, 115 volt, AC model, will operate 30, 25-watt lights at one time, and various power tools with motors not exceeding ½ H.P. Kohler Co., Dept. AB, Kohler, Wis.

POWER PLANE **AB55015**
Guild Plane, Model 101, has interchangeable motor which can be quickly transferred to Porter-Cable's Guild router, saving cost of

additional motor unit. Maximum cutting width, 1-13/16 inches allows its use in construction from outside doors to finish trim. Operates at 20,000 R.P.M. Weight, 8 pounds. Can be converted into shaper jointer, and also serves as a portable moulding plane when spiral cutter is replaced by shaper cutters. Porter-Cable Machine Co., Dept. AB, Syracuse 8, N.Y.

FLOWER BOXES **AB55032**
Leigh flower boxes help dress up a house by their colorful appearance. Finished and ready to install, they are built of heavy gauge steel, zinc coated, bonderized and finished with two coats of baked enamel. Front and back edges are heavily reinforced. Holes in bottom drain excess water. Furnished in green, blue or tile red enamel. Length, 30 inches. Air Control Products, Inc., Dept. AB, Coopersville, Mich.

FLOOR VISE **AB55024**
Drop-Klamp floor vise holds heavy doors, windows or plywood sheets firmly in upright position. When door is dropped into unit, weight of door actuates vise to hold it firmly for plan-



ing or sawing, hinge and lock work, fitting door knobs, and other work. Fiberboard liner prevents marring of polished surfaces. Made of 12-gauge steel, it is 9½x7 inches, and weighs 5¾ pounds. Lakeshore Manufacturing Co., 428 H, Dept. AB, 2nd Ave. S., Minneapolis 1, Minn.

(Continued on page 136)

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 79 W. Monroe Street, Chicago 3, Illinois

NAME ..... ADDRESS .....

CITY ..... STATE .....

AB55001	AB55010	AB55019	AB55028
AB55002	AB55011	AB55020	AB55029
AB55003	AB55012	AB55021	AB55030
AB55004	AB55013	AB55022	AB55031
AB55005	AB55014	AB55023	AB55032
AB55006	AB55015	AB55024	AB55033
AB55007	AB55016	AB55025	AB55034
AB55008	AB55017	AB55026	AB55035
AB55009	AB55018	AB55027	AB55036

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder

SKIL Saw

And on every cut SKIL Saw balance and power make the job easier!

Try SKIL Saw on the tough cuts. Learn what easy-handling really means. Take SKIL Saw with you up on the job. On overhead work SKIL Saw's *two* handles mean safer, more positive control. On the simple cuts, SKIL Saw leaves one hand free for materials handling. And SKIL Saw, not you, does the work.

SKIL Saw's power and durability make it tops for all construction sawing. Choose from 9 hard-working models with capacities to 4⅝ inches. Ask your SKIL Tool Distributor to demonstrate easy-handling SKIL Saw today.

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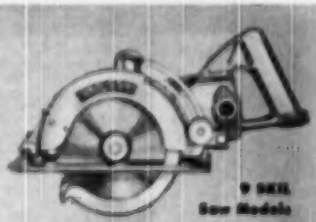
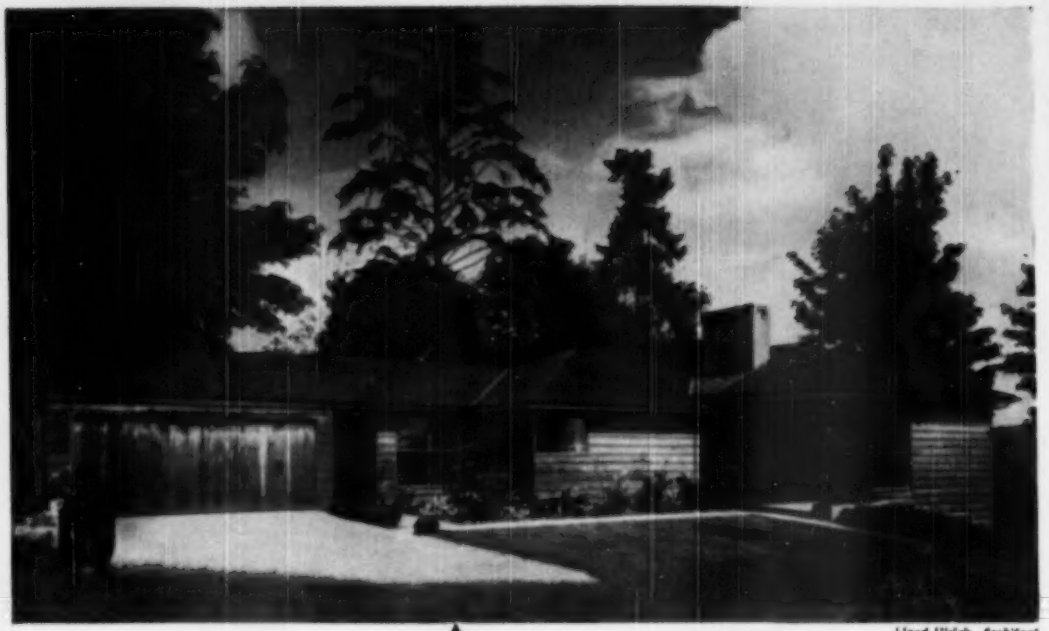
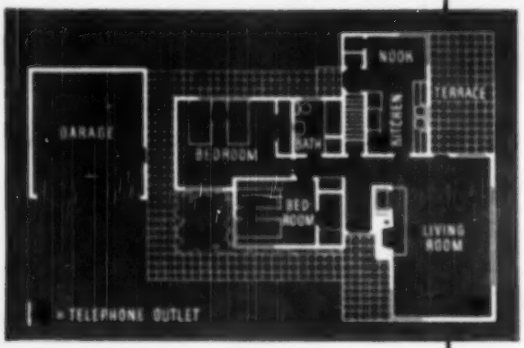


9 SKIL Saw Models
give you the right saw for every use with blade sizes from 6 to 12 inches.



Lloyd Ulrick, *Architect*

THE BEST LAID PLANS INCLUDE TELEPHONE RACEWAYS

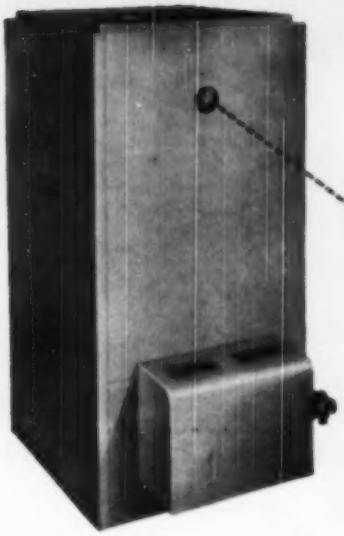


Concealed telephone wiring is one detail today's home buyers inquire about—and appreciate.

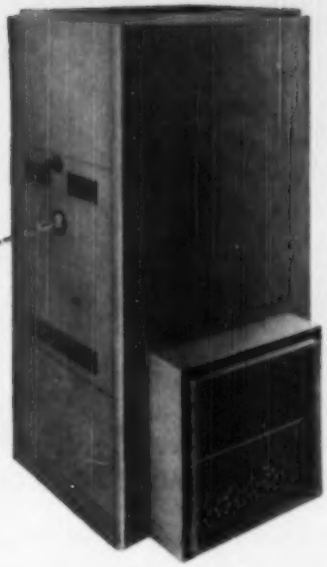
Built-in telephone facilities involve little work, little cost. Just mark locations for telephone outlets on your plans. Then, during construction, a few lengths of pipe or tubing can be built into the walls to carry telephone wires to the outlets.

Your Bell Telephone Company will be glad to help you in planning telephone wiring facilities. Simply call your nearest Telephone Business Office and ask for "Architects and Builders Service."

BELL TELEPHONE SYSTEM



This well-known Richmond Seal, proudly attached to every unit shipped, is your guarantee that Richmond standards in design, materials and craftsmanship are rigidly maintained.



Model SG—Gravity Warm-Air Unit—Made with heavy-gauge steel heat exchanger—finished in light-green hammertone baked enamel. Easily assembled. Simple, economical and trouble-free in operation. Made in two sizes: 70,000 and 90,000 Btu input per hour. A.G.A. approved.

Model SU—Forced Warm-Air Unit—Sturdy, rounded-corner casing. Made with heavy-gauge steel heat exchanger and finished with a light-green baked enamel steel jacket. Shipped assembled; two sizes: 85,000 and 110,000 Btu input per hour. A.G.A. approved.

Both Units Made in Two Sizes . . . giving you four new GAS-FIRED, high-quality, efficient heating units, ideally suited for use in low-cost competitive homes and home developments. Use the handy coupon at the lower right to get detailed data and specifications.

RICHMOND PLUMBING & HEATING

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RICHMOND RADIATOR CO.—AFFILIATE OF REYNOLDS METALS CO.

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Richmond Radiator Company AS-5
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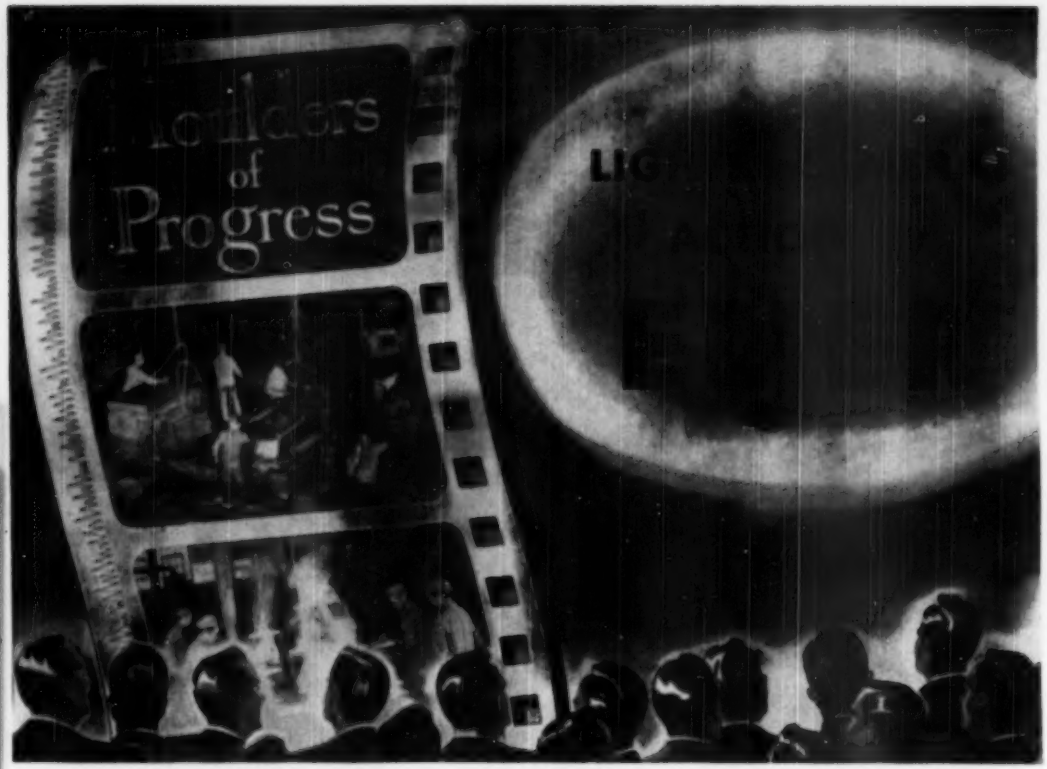
New York 17, N. Y.

Please send me additional information and literature on the new Richmond gas-fired, warm-air heating units. No obligation, of course.

Name _____

Company _____

Address _____



THE NEWEST MOTION PICTURE OF ITS KIND!

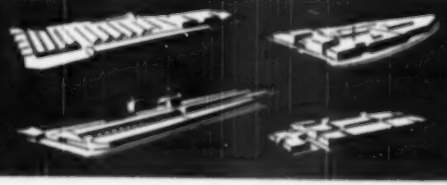
"Moulders of Progress", the new 30-minute Eljer motion picture in full color and sound, shows the spectacular methods by which plumbing fixtures and brass fittings are manufactured in Eljer factories. Never before has this "inside story" been told in such a fascinating manner.

Already at more than a thousand showings . . . in the building industry and to the public . . . people everywhere have marveled at the production achievements that make sanitation in the home possible. And public interest in this beautiful film is tremendous.

You can borrow a 16 mm print of "Moulders of Progress" without charge for showing to your trade association, club, school or any group meeting. Simply see your Eljer Distributor or write direct to Eljer Co., Ford City, Pennsylvania.

It pays you, it pays us- because we specialize in Plumbing Fixtures and Brass

ELJER



ASSOCIATIONS

Their Plans and Activities

NAHB Executive Committee Appointees Announced

Appointments to the NAHB executive committee have been announced by President Thomas P. Coogan. 1950 committee members are: President Coogan, Rodney M. Lockwood, Detroit, 1949 president; William P. Atkinson, Oklahoma City, first vice president, Alan Brockbank, Salt Lake City, second vice president; Nathan Manilow, Chicago, treasurer; Joseph Haverstick, Dayton, Ohio, secretary; Paul Burkhard, Glendale, Calif.; Frank Burns, Denver, Colo.; George Goodyear, Charlotte, N. C.; R. G. Hughes, Pampa, Texas; B. A. Martin, Atlanta, Ga.; O. G. "Bill" Powell, Des Moines, Iowa; and Emanuel M. Spiegel, Passaic, N. J.

In addition to the executive group, Coogan appointed a President's Advisory Committee, with provision made to increase or decrease membership as needed. Named to this committee were Fritz Burns, Los Angeles; Edward R. Carr, Washington, D. C.; Robert A. Bready, Baltimore, Md.; William B. Dixon, Jr., Pittsburgh; and W. Hamilton Crawford, Baton Rouge, La.

Thus far, three committee chairmanship appointments have been made. They are: Legislative Committee, William P. Atkinson; Public Relations Committee, Alan Brockbank; and Education and Public Relations Campaign Committee, Fritz Burns. Burns has already discussed public relations objectives at several association meetings.

'Log Cabin to Budget Home' Theme of Chicago Show

The Greater Chicago Home Fair, to be held at the Chicago Navy Pier May 13-21, will stress accomplishments in living comforts and conveniences during the past century. The home show is sponsored by the Chicago Metropolitan Home Builders Association in cooperation with the Chicago Herald-American. Successive steps in home progress, "from the log cabin of 1850 to the budget home of 1950," will be dramatized.

Detroit Builders Sponsor 'Sons Banquet'

GROUP at "Sons Banquet of Builders Association of Metropolitan Detroit. Edmund Kuhlman, director and member of the executive committee, served as sponsor for the event

Departing from the usual father-and-son banquet custom, the Builders Association of Metropolitan Detroit recently held a complimentary dinner for 50 "bildor" members, associated with their fathers in home building.

Idea for the meeting was proposed to the Detroit Association by Edmund Kuhlman, Detroit builder and a director of NAHB. Said Kuhlman, "These young men will, before many years have passed, be the "bildors" of the Detroit Metropolitan area. Upon their shoulders will fall the full responsibility of maintaining the private-enterprise system in the housing industry. It is necessary, therefore, to begin at once to draw them into the Association activities and inculcate in them full realization of the important part played in the community by the Builders Association, and of the need to maintain high ethical standards and progressive policies in the home-building industry locally and on a national scale."

Since the meeting, the first of its kind to be held under the auspices of the local association, was for sons only—fathers were barred. At the speaker's table were Earl C. Doyle, managing editor of the Detroit Association's official publication, the Bildor; Henry F. Fett, past Detroit Association president; Kuhlman; John Weinhart, Detroit Association president, and Wallace A. Colwell, Detroit Association executive secretary. But no speeches were made. The get-together was "strictly for the sons."

Interest Remains High In Dealer Conventions Throughout U. S.

Reports from dealer regional and state conventions held in all sections of the country indicate that attendance has remained at record or near-record marks. There are in many cases more exhibitors this year and a greater diversity of exhibits.

As in previous conventions since the war, much attention is given to legislation before Congress which affects the industry. Increased emphasis is also being placed on group discussions of business operations, with convention schedules calling for an increasing number of these sessions.

Summaries of activities at nine of the meetings are given below:

Ohio

Emphasis at the 69th Annual Convention and Exposition of the Ohio Association of Retail Lumber Dealers was placed on the need for low-cost housing and the preservation of the free enter-

(*Continued on page 72*)

NAREB Leaders Visit Europe

Robert P. Gerholz, Flint, Mich., president of the National Association of Real Estate Boards, and Herbert U. Nelson, executive vice president, recently returned from a two-week visit in Great Britain, France and Belgium, where they studied property management and all phases of home building and real estate.

Cy Sweet Says-

C. B. SWEET, President, National Retail Lumber Dealers Association

Are you a LIFTER or a LEANER?

This question is a most timely and significant one because we all know that during recent years an alarming portion of our population has joined the ranks of LEANERS, people who have come to lean upon the government for support. Most of these citizens have been misguided through misinformation, and through unadulterated demagoguery, to believe that perhaps it is the function of government to furnish all kinds of props upon which they can lean for support.

Our forefathers, literally speaking, lifted themselves up by their boot straps from a condition of social, religious, and economic slavery and tyranny, to a position of free men and women. When they fought for their independence they were not merely protesting against a tax on tea. They were fighting for a nobler purpose, they were fighting for the right to choose their religion, their job, their profession, their purchases, and to be free to enjoy the fruits of their labors, ingenuity, and abilities.

Out of this, ultimately, came the unparalleled achievement of 7 per cent of the world's population, producing more new wealth than all of the other people in the world. It was achieved through the spirit and philosophy of the people wanting to be LIFTERS.

Unfortunately, in recent years a new philosophy has come into being, ushered in by expert planners. These planners said, "Why tire yourself trying to lift, there is a better and easier way, let the government give you a prop to lean on." The props were named—Social Security—Public Housing—Public Medicine—Public Power and Federal Education.

The planners, however, neglected to tell the people that the props they were offering would cost billions of dollars, continued deficit financing, and ultimate bankruptcy of the government. They further neglected to say that the priceless heritage of personal freedom was being traded for these props.

The time has come when we must all again band together and, like our forefathers, become LIFTERS, in order to check the forces intent upon making this a country of LEANERS. We must never forget that this nation was not built by LEANERS, but by LIFTERS.

Joseph Quinn Named to Staff of Long Island Institute

Joseph Quinn, past vice president of the American Gas Association in charge of industry, and for 25 years industrial and commercial sales manager of the

JOSEPH QUINN

Brooklyn Union Gas Co., has been named assistant to Otto J. Hartwig, executive secretary of the Long Island Home Builders Institute to fill the place of Lorenzo Pando, who died last December, it has been announced by Leonard L. Frank, president of the Institute.

A native Long Islander, Quinn, who lives in Freeport, N. Y., has been engaged for the past five years in trade association work. Having studied at Massachusetts Institute of Technology and Columbia University, he is an industrial fuel engineer by profession and is a past president of the Brooklyn Engineers Club.

49 Complete Short Course In Lumber Yard Operation

A dinner honoring 49 graduates climaxed a short course in retail lumber operation and merchandising conducted by the University of Massachusetts, Amherst, under the sponsorship of the Northeastern Retail Lumbermens Association. The dinner, at which certificates of completion were awarded, was held recently at Amherst and was attended by a number of Association members and college officials.

This was the tenth institute of its kind sponsored by the Association. Students heard more than 200 hours of lectures and received approximately 165 publications related to their work.

Certificates were awarded by Dr. R. A. Van Meter, University president. John W. Dain, president of the Northeastern group, made the graduation address.

Business to Double in '50, Perlite Institute Told At Semi-Annual Meet

Wharton Clay, secretary-treasurer of the Perlite Institute, told members attending the semi-annual meeting that their industry will expand 250 per cent during 1950 over 1949 production levels. The dollar volume of business to date exceeds $2,350,000.

More than 80 members of the institute, miners, manufacturers, and fabricators of perlite, met for the third semi-annual meeting at the Knickerbocker Hotel, Chicago, March 14-15 to discuss the future of their rapidly expanding trade.

Among the speakers at the meeting were Dr. Lansing S. Wells, Chief of the Plastering Section, National Bureau of Standards, and P. H. Peterson of the Technical Branch, Housing Research Division, Housing and Home Finance Agency.

Peterson recently prepared the exhaustive study, *Lightweight Aggregate Concretes*, published by the HHFA. During the session he stated that "We are interested in the development of lightweight aggregates because of their promise to reduce costs of construction, improve insulation values and lighten the weight of the structures. This may be brought about by the use of lightweight aggregates in roofs, concrete floor slabs and in gypsum plaster and possibly other ways."

The institute was organized in April, 1949, and held its first meeting in September of that year. Its purpose is to share technical advances among the members, to publicize the advantages of perlite, and to effect standardization and economies for the benefit of the builder and building customer, Wharton pointed out.

The directors of the Perlite Institute are: T. C. Carter, president; J. Don Alexander, vice president; O. N. Gregg; C. H. Hall; and S. W. Johnson.

President Carter stated that the advances to date made by the member companies of the institute have been very satisfying and that the technical data for presentation to the building industry is being rapidly gathered.

Other speakers and advisers attending were: D. M. Catton and C. M. Carlson, Portland Cement Association; E. M. Lurie, national director, National Foundation for Lathing and Plastering; E. D. Quanstrom, Lathers' Union; Thomas Dowling, Chicago Plasters' Local; Byron Dalton, Chicago Plastering Institute; Joseph McNulty, plastering contractor; and Henry Penn, district engineer, American Institute of Steel Construction.

John Weinhart Elected President of Detroit Builders Association

John Weinhart was recently elected president of the Builders Association of Metropolitan Detroit at an election meeting of the Board of Directors held in the Detroit Harmonie Club.

Other officers elected were Edward Rose, first vice president and chairman

JOHN WEINHART

of the executive committee; Frederic W. Gerhardy, secretary; Gustav F. Scheurman, treasurer.

Four vice presidents were also elected, including Carl Lundblad, Edward Pratt, Norman A. Burns and James Rossin.

The new officers will serve an annual term or until their successors are chosen. Officers of the association are elected by a 30-man Board of Directors.

Oklahoma A. & M. Offers 4-Year Dealer Course

A new four-year course for building material dealers will be included in the 1950-51 curriculum of Oklahoma A. and M. College, Stillwater, college officials have announced. The course will lead to a B.S. degree.

The educational committee of the Oklahoma Lumbermen's Association, consisting of Chairman R. A. Parker, Ponca City; Bud Everitt, Enid; R. O. Fox, Stillwater; Walter Kelly and Dale Carter, Tulsa; and W. M. Morgan, Association secretary-manager, conferred with school officials in planning the courses, which will be offered for the first time next September.

Field Secretary Appointed by Columbus Group

Robert R. Davis has been appointed field secretary of the Columbus, Ohio, Home Builders Association, the Association president, J. Alfred Shuman has announced. Davis, a Columbus resident, will work on membership, call on builders, assist with promotions and publications.

A World War II veteran, Davis has had real estate and banking experience.

Cortright's Column

FRANK W. CORTRIGHT, Executive Vice President, National Association of Home Builders of the United States

YOU GET THE KIND OF GOVERNMENT YOU DESERVE

Washington is the craziest place in the world.

At the same time, it is the capitol of the world, and your welfare and that of the generations to come is in a large part dependent upon the decisions made here.

After eight years of constant work with the Congress, with the administrative agencies of government and with other trade association groups, I find it an increasingly difficult and challenging place. It is challenging because the governmental machine grows bigger day by day and it is difficult because our competitive capitalistic profit-earning system is being replaced with the ideology of the "Social Welfare State."

One peculiarity of Washington is that people who come here to work invariably change. Before long they become important or unimportant. Many politicians become Ponderous, Pompous or Pontifical. Some Parlor or Penthouse Pinks become outright Reds. Crusaders become Profound Protagonists of various causes.

As in every city, there are the Poor, the Pathetic, the Powerful, the Patient and the Pitiful, but all of them before long become POLITICAL. It is a characteristic of everyone in Washington to play the game of political expediency, logrolling and a variety of tricks.

Endeavoring to work through all this welter of legislative and administrative currents are literally thousands of representatives of religious, agricultural, industrial, educational, veterans and labor organizations.

It is tragic that through the years, the term "lobbyists" has taken on the connotation of slyness and evil intent. *The fact is that the legislative body of our government never has—and never can—function satisfactorily without the information supplied by these representatives of organized American life—these lobbyists.*

I know of nothing more unfortunate than the fact that the American people have been misled in this respect and have, as a whole, failed to become lobbyists individually and support the lobbyists who are honestly trying to influence legislation in a practical and constructive manner.

As a people, we have a childishly naive belief that someone else will select and elect good Congressmen and Senators. We vote for party candidates because we like their photographs or oratory. After election, it never occurs to us that they must vote on hundreds of issues each year, and that their votes will be cast the way a small vocal minority of the constituents suggest.

Those of us who endeavor to be constructive and effective lobbyists succeed only as our membership responds to our request for constituent influence on their elected representatives.

Reducing this to simple language, it means that if you do not take time to send good men to Congress—and if you do not advise these men from time to time regarding the facts of the legislative problems before them—you will get bad laws!

A sufficient number of bad laws will eventually weaken your business no matter what it is—will give you an insupportable tax load and, worst of all, will eventually destroy the free enterprise economy under which we as a nation have so greatly prospered.

Therefore, I say to you, that no matter what you think of Washington—and "mad house" is the term I most often hear applied to it—do not forget that it is the place in which the future and safety of our economy and our nation is located. It is peopled with and run by fallible human beings just like you and me—from the White House down to the humblest bureaucrat. It is your job and your responsibility, along with 148 million other American citizens to be concerned with it and *to do something about it*—we can only be as successful in serving you as you make it possible for us to be.

IN OTHER WORDS, YOU WILL GET THE KIND OF ECONOMY AND THE KIND OF NATION YOU DESERVE!

Dealer Conventions . . .

(*Continued from page 69*)

price system. An estimated 4,000 persons attended the Jan. 24-26 meeting at Cleveland's public auditorium.

C. B. Sweet, NRLDA president, spoke on the government's present housing program. Other speakers included Don Beaumont, president of the Cleveland Lumber Institute; Chester C. Kelsey, manager of the Asbestos Cement Products Association; and Harrison Wood, radio commentator.

An innovation was a "Top Management Breakfast," at which an open discussion was held of dealers' problems. Howard Potter, Worthington, was moderator.

JOHN M. HORN

John M. Horn of Hamilton was elected to serve as the Association's 1950 president, succeeding J. Irvin Jones, Columbus. Completing the officers' roster are: William M. Stine, Bryan, first vice president; James E. Clemens, Youngstown, second vice president; Allen Brain, Springfield, treasurer; Findley M. Torrence, Xenia, secretary; and Charles E. Benson, Columbus, field secretary.

Wisconsin

All previous attendance records were broken at the 60th annual convention of the Wisconsin Retail Lumbermens Association, despite bad weather throughout most of the state. 3,384 registered for the meeting, which was held Feb. 14-16 at the Milwaukee auditorium. The record for number of exhibits was broken when 196 were occupied by 177 exhibitors.

Other record-breaking marks were: 450 persons at the Royal Order of Dumb Bells' luncheon, 394 men at the Hoo-Hoo party and 984 persons at the dinner-dance. Among the guests of honor was Mrs. W. O. Hoffman of Fort Atkinson, who was attending her forty-sixth consecutive convention.

Attendance at business sessions was equally good. Among the speakers were Clyde A. Fulton, NRLDA vice president; Edward G. Gavin, *American Builder* editor; W. H. Schmidt, Jr., transportation editor, Railway Age; C. W. Wright, Toronto, Canada, sales consultant; Harrison Wood, radio commentator; and G. F. Hoppe, sales promotion manager, Insulite Division of Minnesota and Ontario Paper Co.

R. E. NUZUM

Re-elected to office were R. E. Nuzum, president, Viroqua; H. P. McDermott, secretary, Milwaukee; and J. E. Richardson, treasurer, Sheboygan Falls.

Southwestern

Dealer discussion groups were one of the most popular features of the 61st annual convention of the Southwestern Lumbermen's Association, held at the municipal auditorium, Kansas City, Jan. 25-27. Registration for the meeting was 3,162 and there were 159 exhibitors.

The 12 discussion sessions included such subjects as "Financing Home Construction," "Advertising and Public Re-

(*Continued on page 160*)

100,000 Visit Seattle Show

VIEW of section of Seattle Home Show. Throng of visitors is example of high attendance.

Approximately 100,000 persons visited the 1950 Seattle Home Show and Household Fair, sponsored recently by the Seattle Master Builders Association and the Seattle Post Intelligencer. The nine day event was held in the new field armory.

One of the show features was a 1,650 square-foot model home designed by John I. Mattson which presented unusual treatment of plan, materials and equipment. [*Rendering and floor plan of Architect Mattson's model home are shown in back pages of this issue.*]

A "Dream Home" contest for house models also attracted wide interest. The competition was open to all persons except professional architects and builders.

Press, Radio Luncheons Prove Good Association Public Relations Activity

An experiment in public relations by the West Coast Lumberman's Association has shown outstanding results according to a recent statement by Association officers.

"One year ago," the statement said, "the Association invited radio and newspaper people to luncheons in our two largest centers of population (Seattle and Portland). We found that they welcomed the opportunity to get together under outside sponsorship. It was understood that we were not after direct publicity from the meeting, but that our purpose was to supply information on the situation and prospects of the region's most important industry. Questions were invited."

The story at that meeting was of the success of the Association's advertising and promotion work for the economy grades of West Coast lumber—particularly its marked effect on the solution of the problem of increasing forest utilization.

"We left these moulders of public opinion convinced that the progress shown in this phase of forest conservation was a certificate of the permanence of the West Coast forests and lumber industry," the statement continued, "and that socialized forestry is not needed."

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See our new catalog in Sweet's Builders' File. Write us for literature and information that will show you how Bruce Blocks can give your homes new floor appeal.

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Prominent builders all—and all choose Kelvinator products for their projects. Again, each man's choice is based on long years of experience. And each man points out the beauty, dependability, user-acceptance and low-maintenance costs of Kelvinators over the years. For full information, write to Department AB, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.

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What Price Freedom

WHAT can the home building industry afford to spend on public relations? How much is it worth to awaken the public to the danger of the drift toward national socialism, clearly exemplified by the public housing bill passed by Congress last year? How much is it worth to arouse the workingman and the small home owner to a realization of the fact that the price of public housing, public medicine, and government ownership of railroads and utilities is individual freedom and government confiscation of private incomes through exorbitant taxes, wastefully spent by Washington bureaus?

What is it worth to make the American public realize that every time any man sends one dollar in taxes to Washington to feed socialistic bureaus, only a fraction of that dollar ever returns, and that in the form of alleged benefits of extremely questionable value to anyone? What is it worth to prove to the public that government paternalism is no different than any other kind of paternalism—that it means control, direction and regimentation of all individuals? What is it worth to arrest the present drift to economic calamity and individual subservience to big government with an array of simple facts, plainly told?

Probably no one will know what it is worth until and unless the opportunity to appraise the value of what is at stake has passed. There are, however, some criteria, and there are some concerted and successful efforts being made to devise and finance programs of public education. In Chicago the home building industry—all segments of it—through the offices of the local home builders association raised $25,000 entirely apart from dues to any association for a public educational fund to be spent locally. In Seattle the industry raised enough to tell the voters the hoax of public housing, and defeated it there in a referendum vote, 57,732 to 33,529. In Yakima similar action defeated public housing seven to one. In a host of other cities comparable results have been obtained.

The fact that public housing has been beaten in many cities by referendum, permitted but not prescribed by law, does not mean that the issue is settled in those cities. The proponents of big government and socialism are well organized and well financed. The battle, now at the grass roots level, has only really begun in earnest.

The champions of freedom will have to fight at both the national and local levels, and will have to fight with money as well as effort.

What is it worth? It is worth that price at which every man in his own mind values his birthright and the birthright of his children. It is worth what every man believes is the worth of the sacrifices that have been made since 1776 to create a nation dedicated to the cause of individual freedom and the personal incentive of free enterprise that gives every man his chance. The issue is clear. The question is whether this generation chooses to reach into its pockets, and to spend its time and effort to guarantee its children the same freedom and opportunity that it inherited from its forefathers.

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Promotional idea aimed at stimulating local interest in new Herrick Park project mushrooms into state-wide publicity

R. S. MOORE, left, and R. W. Herrick at opening day of Herrick Park, Tecumseh

EDITOR'S NOTE: Due to the significant role power tools and equipment are playing in the attainment of today's housing record, *American Builder* again takes the reader on the job to see how these tools and equipment are used to save time and money.

In this age of advanced technology when the key word is power, old methods of labor by hand are disappearing — slowly in many cases, faster in others. In some cases the transition from no power tools and equipment to a few has been so gradual that the builder himself cannot give an exact date for the changeover. In other instances, the change has been overnight — as quickly as a builder could be convinced that the change meant dollars saved.

The following stories offer convincing proof to the builder — that modern power tools and equipment can save money; and that they are playing a leading role in today's housing achievements and in tomorrow's plans.

SALESMANSHIP days of Barnum and Bailey may be gone forever, but their dynamic showmanship is far from forgotten. These master promoters would have liked an outburst of enthusiasm shown not long ago in Tecumseh, a small Michigan town with large ideas. Motivation for an unusual event came about when a local lumber dealer, R. S. Moore, faced the job of promoting construction of a 180-house project.

Because of a liberal offer made to citizens who would build on a tract of land provided, promotion promised not to be a difficult task. But Moore, with a flair for showmanship, saw more possibilities than the usual first-spadeful-of-dirt ceremony preceding such a job. There were, he thought, dramatic possibilities for a real promotion job—with the power tools and equipment to be used in the project.

Two days before official opening of

POWER TOOLS and equipment followed a stirring marching band down Tecumseh, Mich. main street two days before official opening of Herrick Park. This promotional stunt interested home buyers, and was widely publicized throughout state of Michigan

Power Tools Go On Parade

the project, Herrick Park, Moore untapped his idea. Newspapermen converged on the town, cameras clicked, and almost overnight practically everyone in Michigan knew about it.

Moore's idea: When power tools and equipment follow a band on parade down main street—that's news. And it was. Everything from power hand saws to large excavating and earth moving equipment was in the parade; in fact, all power tools and equipment used by five builders who were to participate in construction of homes in the project went down a crowd-jammed main street, preceded by a high school band. Local citizens lined the streets; then a few days later, lined up to buy homes in the new subdivision.

For the power tools and equipment, it was just the beginning. Today, two years and over 60 homes later, Herrick Park is developing into the town's proudest addition. And the same tools and equipment are contributing as much to cost savings in erection of homes as they did to a sensational promotion job. Through cost savings made possible by their use, and through a generous citizen, R. W. Herrick who bought and offers lots in the subdivision free to qualified persons who build there, more than 60 families have bought homes for as low as $7,000 and as high as $25,000.

Homes completed in the 52-acre tract so far have been conventionally built, both to sell and on contract. Herrick, president of Tecumseh Products, had the tract subdivided into three lot sizes, 50 x 120, 70 x 150 to 160, and 100 x 200 to 300 feet. Depending on the size of the lots, homes were to be built in what he termed A, B, and C classes. Homes in the A class sell for about $25,000; those in B for about $10,000, and in C, about $7,000. Any local builder was invited to build in the subdivision, and five building firms so far have participated. As might be expected, a pleasing variety in design is one of the results.

Power tools were used extensively by all of the participating builders, though most of them with one exception did not build over 10 homes per year.

How power tools save money is explained by Builders Kempf and Matheny, who have completed three A homes and one B home in the project. These builders employ an average of six men, and supply them with enough power tools so the amount of work they complete is more than twice the amount they could complete without them. Says Matheny, "It used to require five men to do the necessary frame work on a job with our firm. Now, one man with a power hand saw can do the same amount of

work." He indicated that comparative cost savings are made with other power tools he uses, though, with one exception, he makes no special use of them. The exception is a power hand saw bolted to a table.

The lightweight saw table built by Matheny has an opening for the saw blade and provisions for bolting a saw to the underside. The saw is attached upside down. "It is easier to see pencil marks on the piece you are cutting, since teeth of the blade keep sawdust out of the way and you don't have to look over the end of the saw to see the mark," he explains.

Other power tools used by this building firm include a tilt-type cement mixer, three floor sanders, one edger, a table saw, joiner, band saw, mortiser, drill press, and three additional power hand saws.

One A class home just completed by Kempf and Matheny in Herrick Park offers a good example of the quality work done by these and other builders in the project. The home has a full basement with 7 feet, 3½ inches clearance from the basement floor to the first floor joists, a Heatilator fireplace in the living room and in the basement, and all copper plumbing. Kempf and Matheny take pride in their carpentry, and this offered them a good opportunity to demonstrate their work. The power hand saw attached to the table, Matheny says, is especially handy for this type of work since the unit may be easily moved from one room to another, or from one job to another.

The basement of the house has a large game room with a bar at one end; a spare bedroom just off the game room, and ample space left over for a home work shop, furnace, water softener and water heater. Laundry provisions are adjacent to the kitchen on the first floor. Almost all of the basement is carefully finished in knotty pine. Built-in shelves behind the bar are knotty pine, with McKinney ornamental iron hardware on the doors.

Builder to complete the most homes in Herrick Park is Clifford Riley, who has built about 40 homes to sell (32 in the low priced range), and plans to build 15 or 20 more this year. Power tools used by Riley include five hand power saws, two table saws, two concrete mixers, several hand sanders, and an electric threading machine for plumbing. Riley gives this example of how power tools save money for his firm:

"Four men usually constitute our carpentry crews, using power tools. Without power tools, it would require at least six men to do the same amount of work."

POWER hand saws play leading role in Herrick Park project

CONVENTIONALLY built homes offered by Builder Clifford Riley in Herrick Park sold for less than $7,000, with full basements

HOME built on contract by Kempf and Mathony sold in Herrick Park for about $23,000. Architect is Norris Fremont Prentice

WALTER T. ANICKA designed this home

M. H. THIELAN completed this home

ANOTHER outstanding home in project

PARTIAL LIST OF POWER TOOLS USED IN HERRICK PARK: Allis-Chalmers Manufacturing Co., bulldozers; American Floor Surfacing Machine Co., sanders, spinners, edgers; Chain Belt Co., Rex concrete mixers; DeWalt, Inc., table saws; Ford Motor Co., trucks; Fred W. Wappat, Inc., portable hand saws; J. D. Wallace & Co., table saws, jointers; Mall Tool Co., portable hand saws; Skilsaw, Inc., portable hand saws, sanders, drills; The Jaeger Machine Co., concrete mixers; Unit Crane and Shovel Co., shovel and drag line

Riley employs no prefabrication methods, though he uses jigs on the job for framing. Enough material is usually cut at one time to frame four houses by using these jigs and power saws. Five completely different plans are used for the houses, which are conventionally built throughout. Riley reports that all homes built by his firm last year were sold before completion.

Other builders to complete homes in the project besides Riley, Kempf and Mathieny, are M. H. Thielan, Bradley Construction Co., and Fred Myers. Excavation was done by Charles O. Winters, who used a power shovel and drag line, two bulldozers, hydraulic dump equipment, and several one, and one-half ton trucks. Materials for the homes were supplied by the R. S. Moore & Son Co., of Tecumseh.

A Home a

A SIMPLIFIED system of materials handling and the use of power tools enables a Chicago building firm to average one completed home a day. The system is based on the premise that power tools can work at the peak of their productivity only when material is properly channeled to them.

The builders, H. Morton Robbins & Associates, say time-saving begins in their operations before lumber leaves the yards. Usually, one truck is loaded with enough material to rough frame one house, and lumber is stacked on the truck according to a method commonly in use in many lumber yards supplying material for larger projects. The last piece of material to be used on the house is on top of the truckload, so that after the truck is unloaded at the house under construction, the first material to be used is on top of the stack, easily accessible to the rough framing crews. For instance, when lumber is stacked in front of the house, floor joists will be on top of the load; then subflooring, 2x4's, ceiling joists, roof rafters, and roof sheathing, in that order.

Whenever possible, this firm starts all homes that are to be built along one side of a block at once, about six or eight homes. A crew of from 15 to 20 men work in pairs, and one, two, or three two-man teams work on the house at one time, depending on what stage of construction the house is in. They use power hand saws and gasoline powered, portable generators.

WHETHER it's heavy, fast-moving equipment like this used on their project, or small-power hand tools—the Morton Robbins firm maintains that if you keep the tools busy, power tools more than pay for themselves

Day with Power Tools

Efficiency of power tools and equipment depends largely on how well you keep them busy, says this Chicago builder who co-ordinates his activities to eliminate waste time

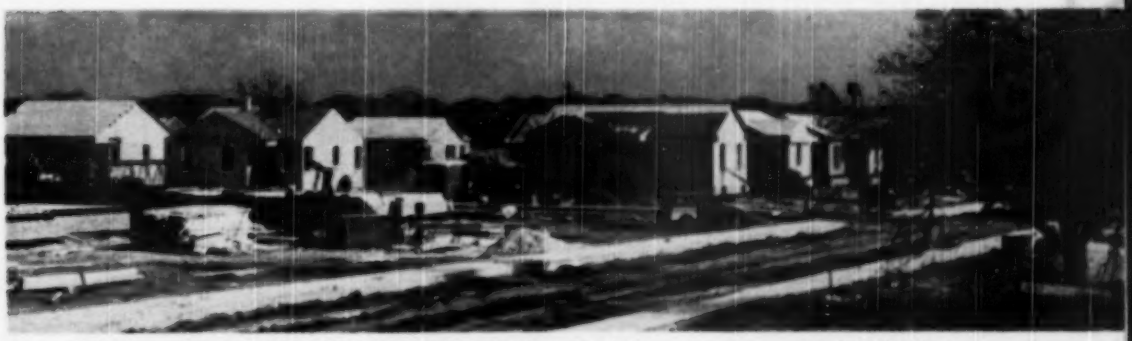
Rough framing starts with two men who cut and erect floor joists, and erect and level beams.

The second two-man team levels the plates and marks off window and door openings. A third team of three men nails the plates to studs, completes assembly of exterior walls on the ground, and raises them into position.

The fourth team of two to four men install window frames and sheathing on the walls, and the fifth team of two men installs ceiling joists and nail blocks for facia. Rafters are erected and sheathing is applied on gable ends by the sixth team of two men, while the seventh two-man team, in about three days, completes framing the partitions. When the last team leaves, the house is ready for lath and plaster. In the meantime, other workers not working as teams have laid the subflooring, helped raise exterior walls, applied sheathing and roof covering, and completed jobs necessary to get the house under roof. Electricians and plumbers have finished by the time the seventh two-man team completes its work.

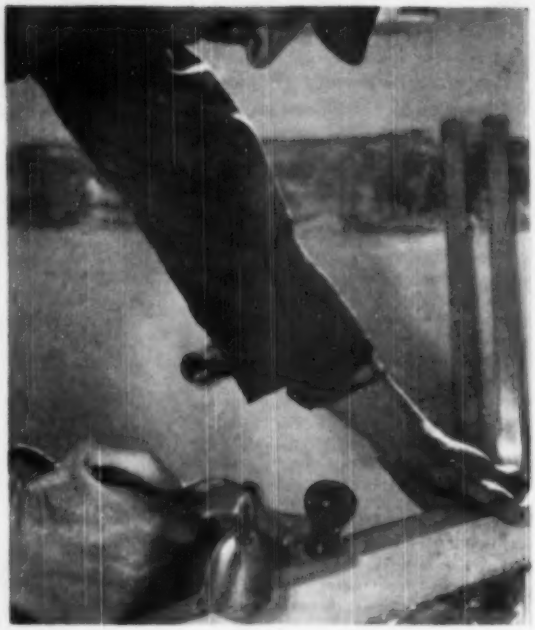
Throughout the whole procedure, efficiency of the system depends on close timing and the organization of men and materials so that the power saws and generator are kept busy as much as possible. Since the houses are close together, little time is wasted by moving equipment from one job to the other, and the system is so worked out that one team seldom has to go

POWER band saws are big time-savers in the current Robbins project, where a system of materials handling and rough framing keeps them almost constantly in use. Saw shown here is made by Skilsaw



STREET scene of current Robbins project illustrates firm's procedure of beginning work on one complete side of block at once

THREE portable generators (background) are used



HAND powered router does the work of several men

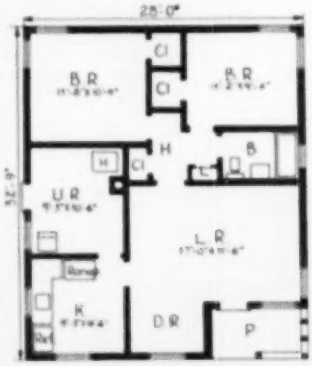
back to a job once it has completed an assigned task.

Power hand saws and generators are only a small part of the variety of power tools and equipment used on the 184-house project nearing completion by the Robbins firm. Besides employing a large battery of excavating and earth moving equipment (subcontracted), the firm used three concrete mixers, a plaster mixer, drills, groovers and other power tools, and Robbins is quick to point out their importance in the attainment of construction speed.

Besides the current 184-house project, H. Morton Robbins & Associates have completed 30 single family units and 26 row house apartments in Evanston, Ill.; 48 single family units in Edgebrook, Ill.; 10 apartments and 40 single family units in Park Ridge, Ill.—all in the past two years. Says Robbins, "Power tools are time and money savers, and without them we certainly could not have accomplished what we have in this amount of time."

Concerning individual tools, Robbins believes that hand power saws save well over 50 per cent on cutting; that power portable generators save much time since they are easy to move

ONE of firm's largest mixers in action



FLOOR plan of typical Robbins home

H. MORTON ROBBINS homes sell in Chicago for $11,200 and $12,500 with 45x130-foot lots. Kitchens are equipped with steel cabinets. Bathrooms have colored fixtures

HOMES along one side of block were started at the same time, and as illustration shows, each will be completed at the same time

around, and that "they provide more power than we would be able to get from regular line power." Robbins, who has used "as many power tools as practicable" since he came into the home building business in 1938, had several years of experience with them before that. During the '20's he specialized in industrial and apartment work.

Homes completed in the current Robbins project sell for $11,200 and $12,500 on 45 by 130-foot lots, and offer good value for the money. Floors are oak except in kitchens, which have inlaid linoleum, and baths where Ceramic tile is laid. Ceramic tile is used to enclose tubs and showers in bathrooms, and plumbing fixtures are colored.

All windows and doors are weather-stripped and screens are provided. Kitchens are equipped with steel cabinets. Heat for the homes is supplied by automatic gas-fired forced warm air furnaces.

Excavation equipment used on this project included a power shovel, a front-end loader, tractor and self-loading scraper, and a grader. Subcontractor R. W. Dunteman, owner of the equipment, says the power shovel can move about 500 cubic yards of dirt in one day; that the front-end loader can dig two average-sized residential basements per day or backfill four or five. High speed in handling dirt may be achieved with the self-loading scraper, he explains, since it automatically picks up dirt, transports it at high speed to any desired destination, then automatically ejects it.

POWER TOOLS AND EQUIPMENT USED: ADAMS MANUFACTURING CO., grader; ANCHOR MANUFACTURING CO., mortar mixers; BAY CITY SHOVELS, INC., power shovel; CATERPILLAR TRACTOR CO., front end loader and scraper; HOMELITE CORP., gasoline-powered generators; SKILSAW, INC., power hand saws; STANLEY TOOLS DIV., THE STANLEY WORKS, groover; THE JAEGER MACHINE CO., concrete mixers.

AIR view of Overlook Acres, a development of homes selling in the range of $10,900 to $12,200

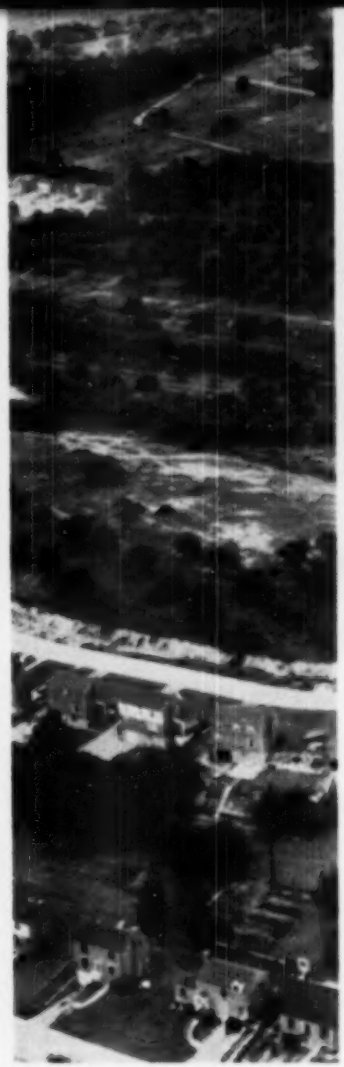
FELIX CASTE

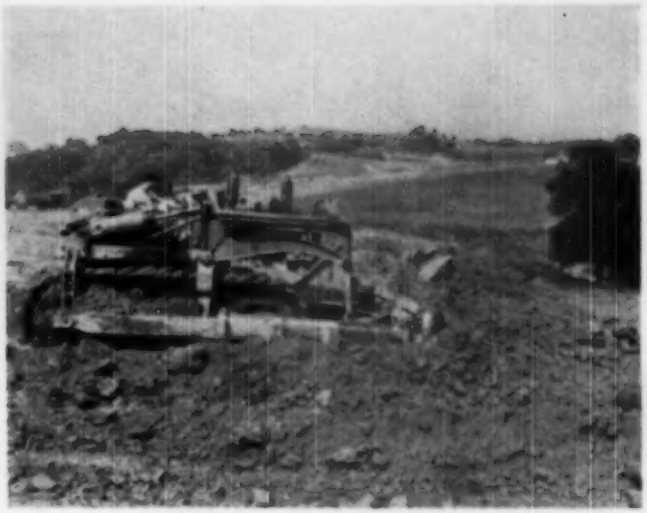
OBSTACLES SURMOUNTED WITH POWER TOOLS

FELIX CASTE, president of the Caste Development Co., of Pittsburgh, Pa., has been building in this area since 1922. His firm is responsible for the development of a number of large housing projects. Overlook Acres, the development featured in this article is currently in the process of completion.

Due to the hilly terrain that exists in and around the city of Pittsburgh, Caste is confronted with the task of moving huge quantities of earth in the process of building. Most of his projects are started from scrath. After acquiring a virgin area of ground his firm puts in all the underground and surface work such as the sewer, water lines, leveling, filling, grading, paving and curbs before any actual construction work is started on the houses.

The fact that Caste is able to estab-

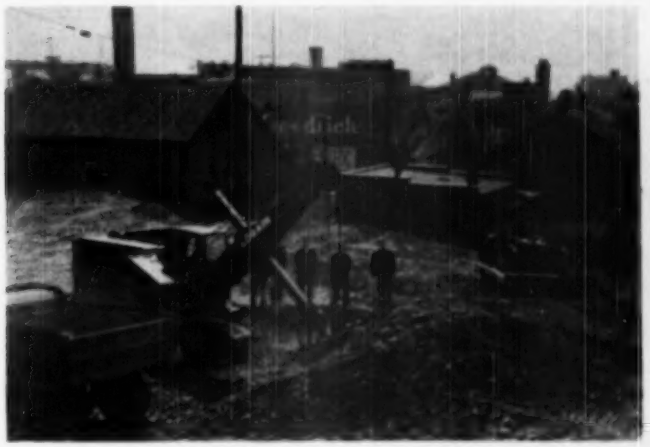




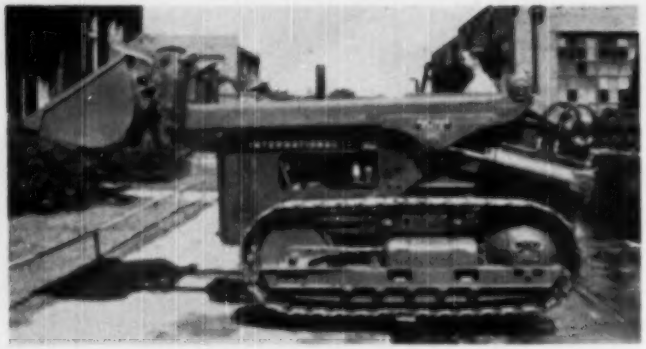
lish economies and maintain values comparable with houses that were offered to the public twenty years ago, in spite of natural handicaps, is due in part to the extensive use of power tools and equipment. An adequate supply of equipment of this nature is owned by the Caste Co., and is carefully maintained and made available for all the men. The power tools include everything from hand saws to heavy earth-moving machinery including bulldozers, crawler shovels, dozer-shovels, bullgrader, graders and rollers. They find that through ownership of this type equipment there is a great saving in time by not having to wait around for rental equipment. In this manner Caste maintains control of all the various phases of his operations with a minimum loss of time.

In his building operations over the past twenty years Caste has held to a standard type, two-story house that is offered in the medium and low-cost price bracket. This type of house has met the needs of the community it was built to serve, with the result that the design has remained fairly static with improvements made to conform to present conditions. This permits the company to accurately compare the cost of homes built in 1949 with those built in 1929.

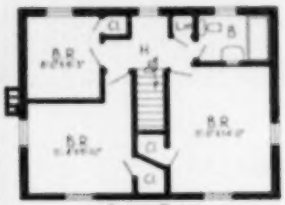
In 1929 a 22 x 24 foot, five room, two-story house was offered for sale for $7,500. The '29 house did not include insulation, copper piping, gas-fired furnace or 180 pound asphalt roof shingles and only half the number of

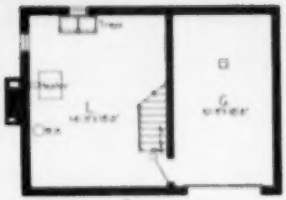


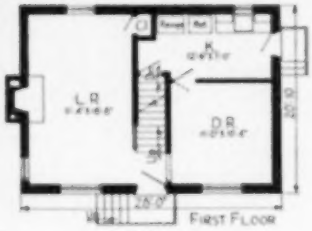
THE bulldozer and crawler shovel are part of the heavy equipment owned by the Caste Co. to carry on their large scale operations. The shovel is used for digging foundations. It moves ½ cubic yard of material with each loading of the bucket. The bulldozer is used for all types of jobs



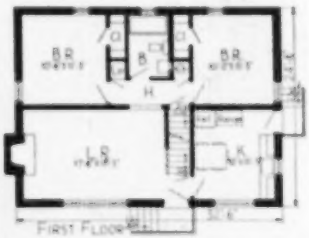
The dozer-shovel (better known as a highlift) is frequently used for excavating







PLANS and home shown above are typical of many of the houses built in Overlook Acres. The sloping ground of the development makes possible the use of portion of basement for garage. The garages occur at front or rear depending on which side of the street the house is located



THE story-and-a-half house, above, with half story left unfinished, is a variation from the typical two-story houses that characterize this development. All face brick or a combination of brick and wood siding are used on exterior

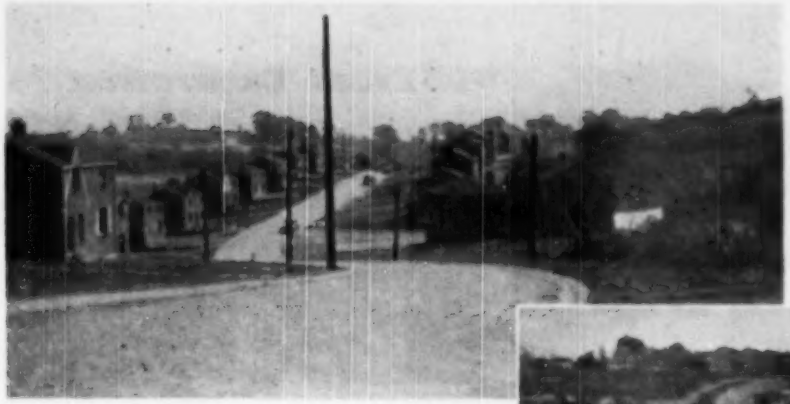
electric outlets that were contained in the '49 edition. Downspouts were not connected to the sewer; a wood floor was placed in the bathrooms, and Keenes' cement wainscot was marked off on the walls. The maximum width of a lot was 30 feet as compared to the minimum of 50 feet now required. Paved roads, curbs and gutters were not included in the price of the house. These were taken care of by the new purchaser at a later date. The prototype of the '29 house, including all the items mentioned together with complete landscaping, is now offered by the Caste organization for $10,900.

Overlook Acres contain approximately 300 homes ranging in cost from $10,900 to $12,200. The majority of the houses are the six-room, two story type, with full basements, and garages. Others are one-and-one-half story houses with four rooms on the first floor and with the half story left unfinished. Complete basement includes garage.

A number of exterior variations are used, including combinations of wood and brick, change of window fenestration, roof lines and color combinations. The position of the garage in relation to the house changes in accordance with the ground profile. The development site, being extremely rolling, required a great deal of cut and fill for streets and buildings. Economy has dictated a pattern of approach from street to house.

The present Caste organization is built up almost entirely on mutual confidence which has engendered loyalty and good will among the employees over the course of years. Management and labor have never been in any serious disputes. All the men are considered a part of a permanent group, with equal consideration being given to each employe, whether laborer or superintendent. The policy has developed a spirit of cooperation within the organization that has paid out in dollars and cents through greater efficiency of operation. A continuing program of work, arranged to keep the men busy during all kinds of weather, is responsible for the sustained confidence of the workers.

All of the above adds up to just one thing: reduced costs. This enables Caste to offer to the public a better house for less money than his competitors. His sales organization is composed of one man. Advertising is unnecessary because this company's efforts are well known in the Pittsburgh area and the name Caste is synonymous with good workmanship and a fair price.



UNIFORMITY of appearance and plan is characteristic of the houses in the Gilmore development shown at left. Work under construction below

Ratio of Value to Cost '41 — Present

A COMPARISON of costs on the Stevens plan, one of a series of houses completed in 1941 by the Catranel Construction Co., Pittsburgh, Pa., with the Gilmore plan houses, part of a recent development by the same company, brings to light some interesting facts.

The increase in home construction costs has in most instances been attributed to labor and material. In the following schedule Roland Catarinella, son of the founder of the business, sets forth a brief comparison of the two plans.

STEVENS PLAN——1941

Lot size ..... 56 feet by 110 feet
Street Improvement ... County road, bad condition
House size ..... 21 feet 6 inches by 26 feet 6 inches
House description .... Brick veneer, six rooms with bath, integral garage, 1,140 square feet
Kitchen and bath ..... Linoleum
Plumbing ..... Copper throughout
Furnace ..... Coal fired
Coal bin under stoop, non-wood burning fireplace with mantel.
Sales price $6,705.00

GILMORE PLAN——PRESENT

Lot size ..... 50 feet by 190 inches
Street Improvement .... Asphalt top street with rolled concrete 50 feet dedicated curb
House size ..... 21 feet 6 inches by 28 feet 4 inches
House Description .... Brick veneer, six rooms and bath, integral garage, 1215 square feet
Kitchen and Bath ..... Linoleum
Plumbing ..... Copper throughout
Furnace ..... Gas fired
Large dressing closet
Sales price $10,400.00

In comparing the two houses it is apparent that the sales price of the present home is only 55 per cent greater than the 1941 home. In addition, the present house has 75 square feet more floor area. In 1941 the FHA and township required a 5,000 foot minimum lot area. At present 7,500 square feet are required. In '41 FHA, borough and county, allowed street grades up to 20 per cent and required 40 feet for dedicated streets. At present the same government institutions now have reduced grades to 15 per cent and have increased street dedications to 50 feet. In addition the borough in '41 approved streets that were paved with asphalt top to a width of 20 feet with no curb, while at present the Township requires streets paved to a width of 25 feet with rolled concrete curbs and asphalt top roads. Then there is the comparison of a coal furnace as against a gas-fired with thermostatic control. The improvements set forth add an estimated $700 to the present house. Deducting these improvements leaves a basic cost of $6,505 for the '41 house. These figures indicate that the present house as compared to the '41 house is up 49 per cent.

THREE houses spring from a basic plan which is similar except for position of the stair. One stair is placed at centre, others at rear

BIG Terra Cobra does original grading of site

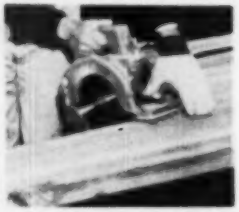
From Excavation to

Specialized work crews making wide use of mechanical equipment contribute to peak efficiency of large California building firm

STANLEY drill is used for boring of holes in mudsills

WHEELED seat for nailing makes it easy to move around

COMET table saw is used for cutting studs and headers



SPEEDMATIC saw facilitates the job of rafter-cutting

SKILSAW is available for framing operations on project

PIPE-THREADING is done on site with Beaver Threader

THE OPERATIONS of one of the biggest builders and developers in the Los Angeles area are marked by the use wherever possible of power tools and equipment—from a heavyweight earth-moving machine for the original grading to power sanders for finishing interior trim.

The construction firm, Valco Inc., of North Hollywood, Calif., is headed by Earl L. White who has been building in the San Fernando Valley since 1915. Since starting in the area by subdividing his own ranch, White has developed Magnolia Park with more than 1,000 homes, has built more than 800 in North Hollywood Village and recently completed a 608 project with 501 apartments. His latest development, Woodman Square, will contain 500 two- and three-bedroom homes.

The building end of the firm's business is handled by White's two sons, with "Perk" White devoting his time to commercial work and Loy L. White in charge of residential construction. Their general superintendent is Leo Bennett. In a sustained program to increase efficiency they have built an organization which combines high specialization by work crews with their wide use of mechanized equipment.

The Woodman Square project is being directed by Loy White and W. J. Lyberger, field superintendent. The original grading was done by J. A. Thompson and Sons with a big "Terra Cobra" made by the Wooldridge Manufacturing Co. of Sunnyvale, Calif. The machine holds 14 cubic yards of dirt and travels to the work site on its own wheels. Where the going is heavy it is usually helped by a "push-cat," in this case an Allis-Chalmers bulldozer. The big machine does the rough work up to a point where a fine grader can take over.

Trenches are dug with a tractor-pulled machine made by a local contractor. Operated by one man, it digs trenches 18 inches deep by 12 inches wide for 14 houses in one day.

Foundations and garage slabs are made with ready-mixed concrete. A Whiteman cement floor finisher, with three trowels attached, completes finish of the garage slab in from 20 to 25 minutes. First used about two hours after the cement is poured, the machine is used again after the cement has reached a firmer set. A hand trowelling provides the finishing touch.

Lumber for each house is cut to size at the lumber yard, and assembled and strapped in order of use at site, with mudsills on top and roof sheathing on bottom. Studs and headers are cut by a Comet table saw, mounted on wheels, which is taken from one pile to another. After the material is cut it is placed as close as possible to where carpenters are working.

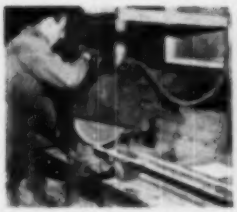
Rafters are cut and notched with a Speedmatic hand saw. The cutter places several rafters on saw horses, makes his plumb cuts, and then cuts the notches separately, these having previously been marked with a templet.

The various carpentry operations are performed by specialized crews. These crews do the same work every day and require little supervision, each being thoroughly trained to time their individual tasks to keep the over-all program running smoothly.

All framing is done with the aid of power saws; the only place where an ordinary hand saw is used is in cutting the rafters just before applying the facia boards.

Several brands of power saws are owned by the company, Field Superintendent Lyberger said, including Skilsaws, Comets, Wappats and Speedmatics. They are given a thorough inspection before being stored overnight in a garage and, if out-of-order in the slightest degree, repaired immediately. To promote better maintenance, craftsmen

Interior Trim with Power Tools



PIPE is cut on job with a Pacific Service pipe cutter

R. L. CARTER jointer used for smoothing rafter tails

PORTER-CABLE sander takes care of finish work on door

DUOFAST stapler attaches insulation to window frames

BRANDED PRODUCTS USED: Transite flue pipe, JOHNS-MANVILLE; service panel, GENERAL SWITCH CORP.; Pencorten window glass, PITTSBURGH PLATE GLASS CO.; asphalt tile, ARMSTRONG CORK CO.; asphalt shingles and Rocklath plaster board, UNITED STATES GYPSUM CO.; American Standard plumbing fixtures, AMERICAN RADIATOR and STANDARD SANITARY CORP.; Coronado bathroom accessories, HALL-MACK CO.; paints, OLD COLONY PAINT and CHEMICAL CO.; building paper, SISALKRAFT CO.

are assigned particular tools which they use continuously.

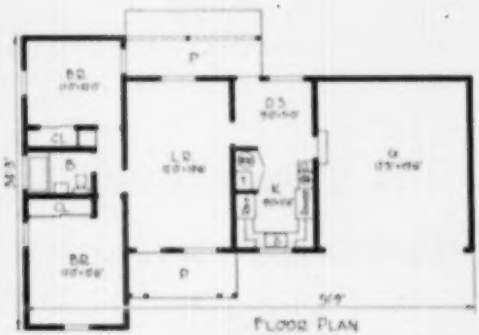
Lyberger figures that a power saw pays for itself within a year. As for safety, he says that this is no problem if the men are properly trained in use of the tools.

Plumbing trees are also prefabricated in a shop set up on the site. The pipe comes in regular 21-foot lengths, is cut to size by a Pacific Saw Service pipe cutter, threaded with a Beaver threader and assembled on jigs. Wardrobe closets are also prefabricated.

Five floor plans and 26 elevations are used in the Wood-

(Continued on page 180)

AIR VIEW of firm's 301-apartment project



TYPICAL floor plan used in Woodmen Square development

WHITEMAN cement floor finisher used on garage slab

ARTIST'S drawing of one of Woodmen Square houses

INTERESTING effects are obtained on both exterior and plan by split level arrangement that conforms to sloping site

A Four-level Modern Provincial House

AMERICAN BUILDER

Blueprint House

Number 41

M. E. Thornton, Architect

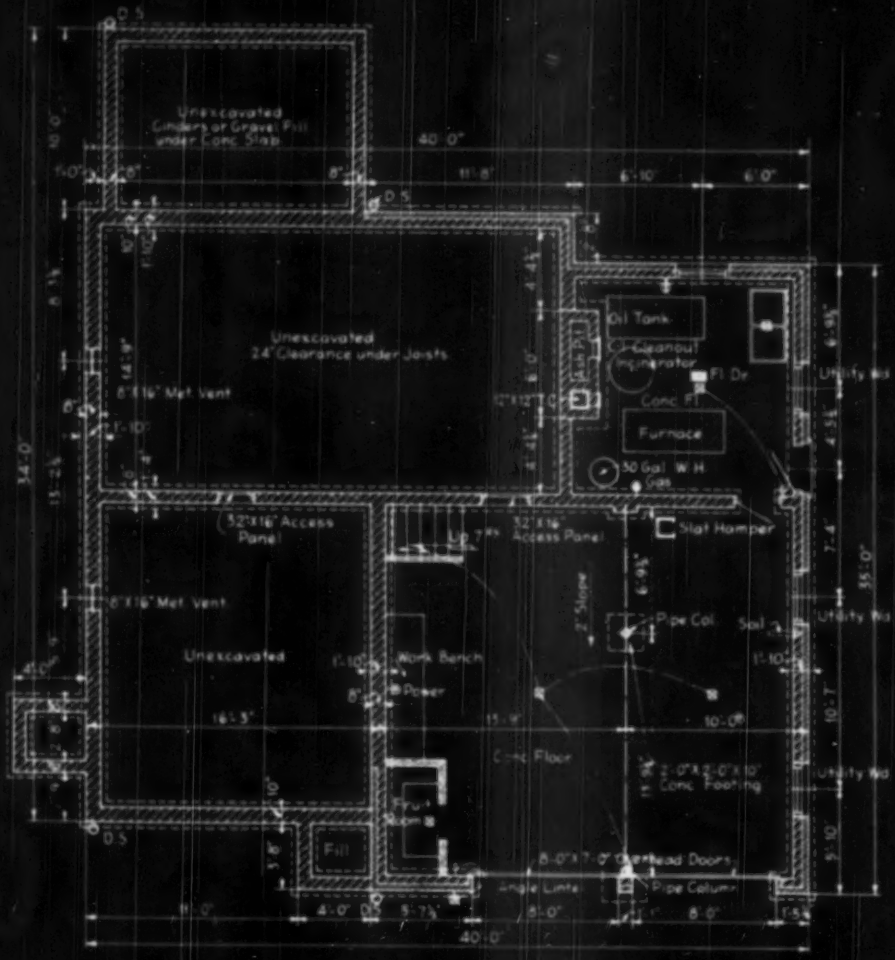
THIS house, designed by Maurice E. Thornton, Indianapolis, Ind., architect, for his own use, represents the latest in split-level plan arrangements in his community. What appears to the eye to be a normal one and one half story house is in reality a house with four distinct levels.

The areas contained in each of the levels are as follows: First level: garage and utility room. Second level: hall, kitchen, breakfast room, living-dining room, and screened porch. Third level: three bedrooms and bath. Fourth level: one bedroom, bath and storage areas.

Thornton designed his house to conform with two important facts recently discovered in research work among home owners by the University of Illinois' Small Homes Council. That is that women do not like to sleep in bedrooms located on the ground floor. In conflict with this feeling is the fact, also found, that neither men nor women like to climb stairs. Thornton's solution was to provide a half flight to each of the levels, thus reducing the stair climbing and eliminating ground floor sleeping.

Luxury accommodations are provided in every room of this house. The 15 x 25 foot combination living-dining room with two picture windows, fireplace, bookcases and adjoining screened porch overlooking the rear garden is a model

(Continued on page 95)



BASEMENT PLAN
First Level

Scale 1/8" = 1'-0"

First Floor Plan
Second & Third Levels

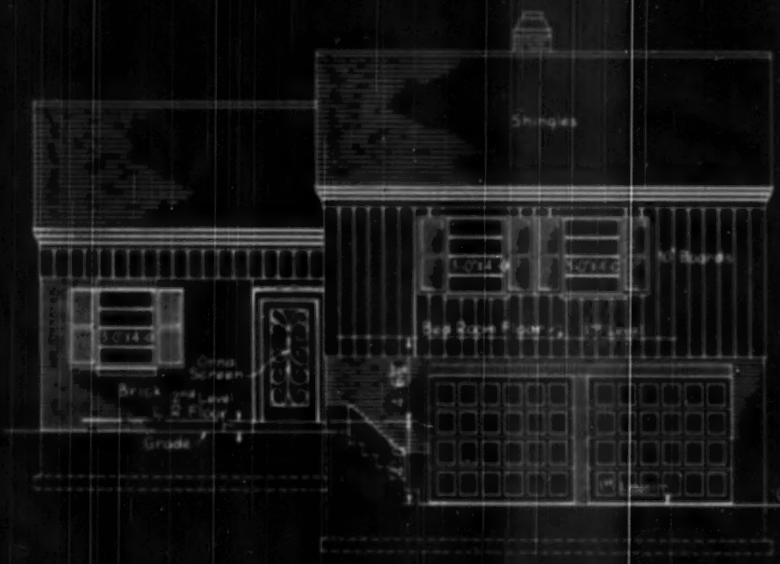
Design No. A B 154

American Builder Blue Print Series

Designed By

Maurice E. Thornton — Architect
5892 Compton Drive — Indianapolis Ind.

Simmons Boardman Pub. Corp. 79 W. Monroe St. Chicago Illinois

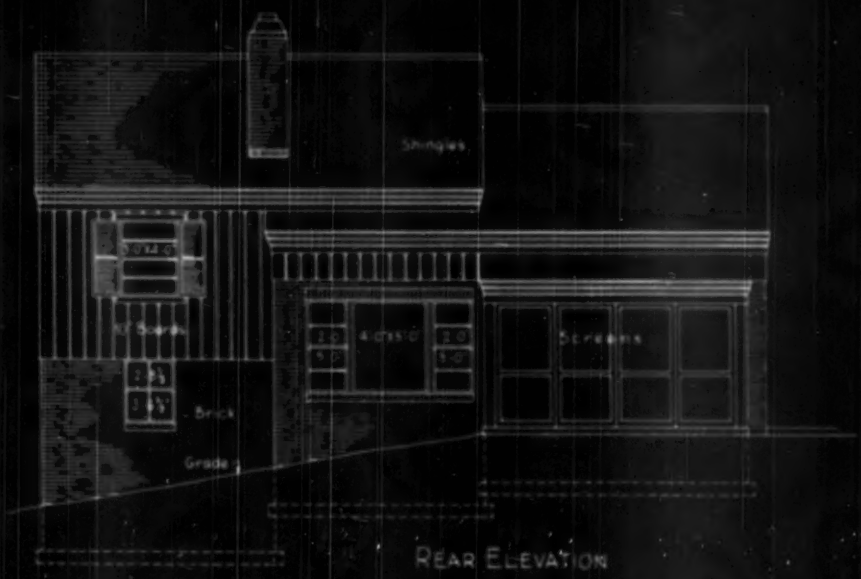


FRONT ELEVATION

Scale ¼"=1'-0"

LEFT SIDE ELEVATION

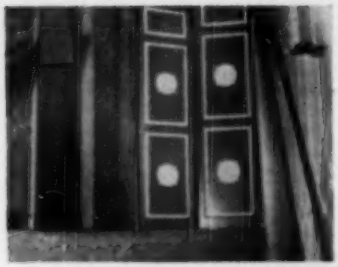
RIGHT SIDE ELEVATION



REAR ELEVATION

PARTIAL view of large combination living-dining room looking toward fireplace and built-in bookcases. Light trough at ceiling over fireplace becomes an extension of cap member of bookcases. Hi-hat spotlights are provided in ceiling in front of bookcases

VIEW toward exterior wall of kitchen with Formica counter top and built-in sink. Lazy-Susan revolving shelves in corner cabinet with compartment directly under to house Mixmaster. Cooking tools and condiment shelves placed over range with all equipment concealed. Tube lighting concealed under upper wall cabinets. Strip lighting is provided over counter



VIEW looking up the second flight of stairs to third level. Ornamental swinging doors in hall provide privacy for bedrooms and bath

BELOW view of kitchen looking toward breakfast room. Divider cabinets above counter open both ways. Tube lighting recessed into bottom of upper cabinet. Cabinets below counter contain sliding towel racks, high bread drawer, etc. All shelves in base cabinets slide out. Plug-in strip lighting is under cabinets

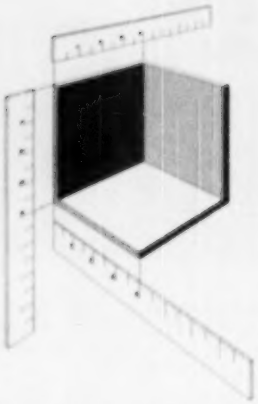
(*Continued from page 90*)

of convenience. The kitchen is provided with a separate breakfast area and with ample space for all equipment. The four bedrooms are of generous size with sufficient closet space for each. Walls of both bathrooms are faced with Carrara glass in distinctive colors to an average height of five feet. Illumination consists of flush, spot, concealed and direct light fixtures with wall plugs and telephone outlets throughout. Strips of electrical outlets are provided along the kitchen walls for plug-ins for equipment. A large ventilating fan, located on the ceiling of the fourth level, draws air up through the entire house. Storage wall cabinets separate bedrooms one and two, and one wall of bedroom three. All utilities for heating and laundering are located in a large utility room on the first level. This includes a water heater, incinerator, and gas-fired forced air furnace.

The exterior of the house is finished in variegated shades of tan pressed brick with vertical battened siding above, in natural finish. Window frames are double hung aluminum with Thermopane glass in the picture windows. Walls and ceilings are completely insulated with four inches of Rockwool.

This house was built by Paul R. Leach of the Development and Construction Corporation for $25,000.

Facts about Modular Co-ordination



A MODULE is a unit of measurement. It may be any number of inches, or feet, and may be applied to width, depth or height

ONE of the fundamental technical approaches to the accomplishment of cost reduction in building is through modular co-ordination, the standardization of materials on the basis of measurement.

If all building materials were made to standard sizes which are multiples of a certain number of inches, and if all architects used these standards in developing their plans, then there would be no waste of material at all, theoretically at any rate.

The idea of modular co-ordination as a method of cutting construction waste was first launched by Frederick T. Heath in 1925. It gained momentum with the development of the 4-inch modular concept by Albert F. Bemis in his third volume of "Rational Design," published in 1936, and got into full swing with the organization of Project A-62 of the American Standards Association in 1939.

Study committees representing all branches of the building industry, including architects, builders, manufacturers, agreed after a thorough analysis that the 4-inch module was the most convenient basis for standardization of building products. This size was selected for the following reasons:

(1) It is large enough for manufacturers to reduce the number of stock sizes and still satisfy consumer demand.

(2) It is small enough for ample freedom in architectural design and for flexibility in equipment layout.

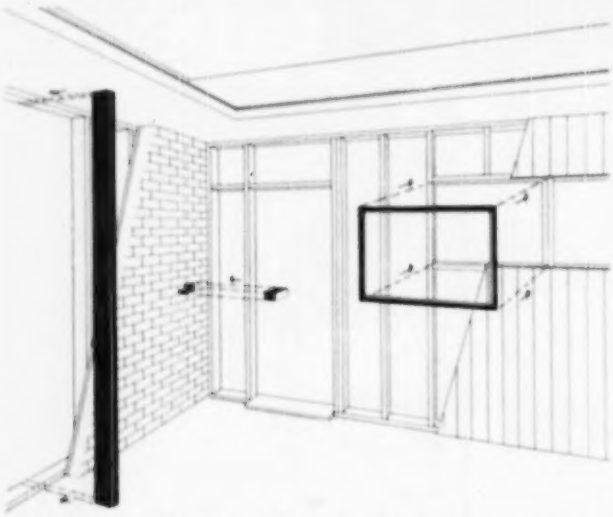
(3) It coincides with the dimensions of a great many building materials already standardized and is applicable to present construction practices.

(4) It is a unit measurement with which architects, builders, masons and carpenters are already familiar.

(5) It approximates 10 centimeters (3.9 inches), the basis proposed by metric system countries working on the same problem.

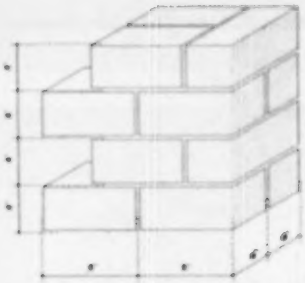
(6) Standardization of houses is prevented, since the 4-inch unit is small enough to permit entire freedom as far as design is concerned.

A number of building material manufacturers have already switched to making their products in the new size. Others, going into production of new materials, have adopted the 4-inch modular basis from the start, with the result that the idea is gradually becoming a movement.

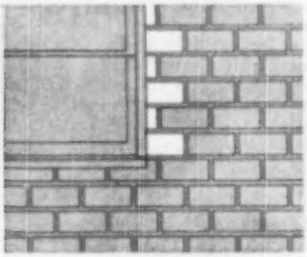


MATERIALS made in multiples of four inches reduce cutting and waste, and can be fitted together in a simple and orderly manner where building was planned for their use

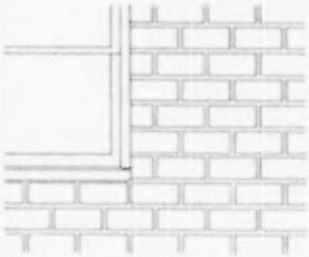
Data and drawings through courtesy of Housing and Home Finance Agency, Washington, D.C.



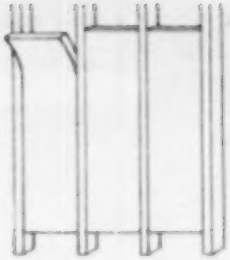
MOST building materials require a certain joint thickness. Manufacturers make their products smaller by amount of joint required for assembly, thus keeping dimensions within stipulated multiples of 4 inches

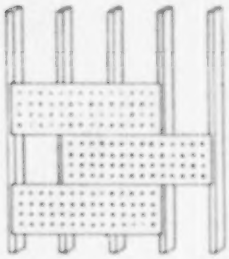


UNCO-ORDINATED window and masonry necessitate extra cost of cutting bricks



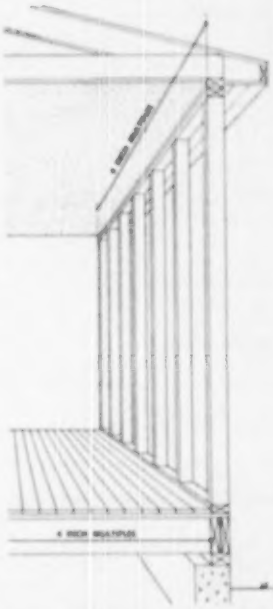
MODULAR window, masonry need no cutting



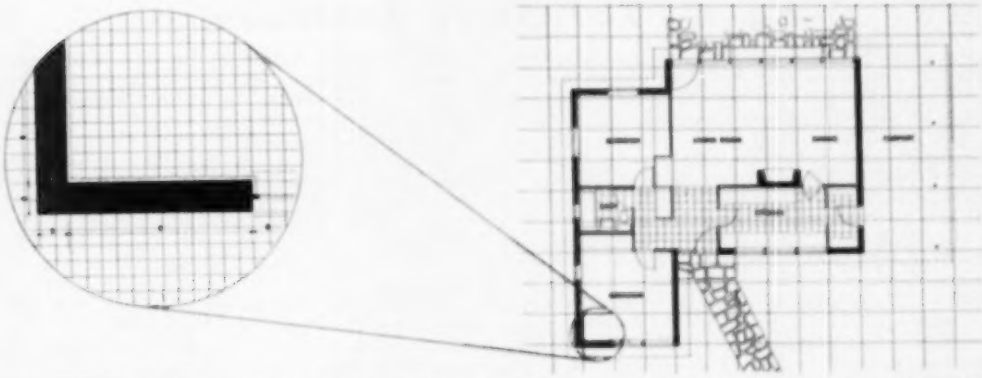


SOME construction practices are already on 4-inch modular basis. Top: bat and blanket insulation between studs spaced 16 inches O.C. Center: 16x8-foot plasterboards fit 16- or 24-inch stud spacing. Below: 4x8 wallboard sheets fit 16x24-inch stud spacing

Let your suggestion pay you five dollars ($5.00) in cash. This sum is paid by *American Builder* for each short cut or job pointer that is accepted for publication. Send all material to Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.



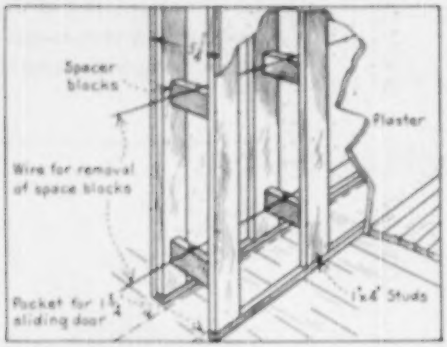
SINCE lumber comes in standard lengths, a well-co-ordinated house design can take advantage of these standard sizes to use them with a minimum amount of cutting



ARCHITECT'S design is on basis of 4-inch module. Grid dimensions "X" (left) are multiples of 4 inches, in example (right), 48 inches

TECHNICAL GUIDE for Builders and Craftsmen

How to Frame for a Sliding Door

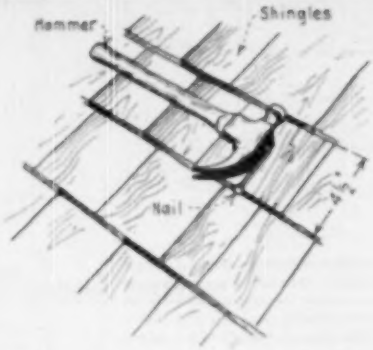


THE job of framing a 1¾-inch-thick sliding door into a 5¼-inch-thick interior partition will get a mechanic into trouble if he is not cautious. The studs at the recess for the door will of necessity be of ¾-inch-thick stock. This means that the danger of these members warping into the door is present. If spacer blocks are cut between these studs before the partition is lathed and plastered, with a light wire secured to each of the spacer blocks for easy later removal, this danger will be overcome. Care should be taken that the spacer blocks are left in place until the plaster is thoroughly set and dry.—Submitted by Raymond R. Neal, Phoenix, Ariz.

How to Remove Interior Trim

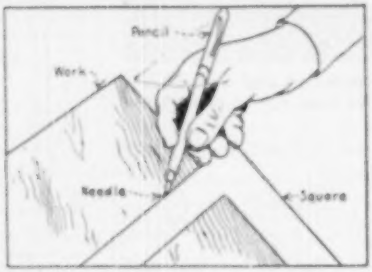
IF INSIDE trim is to be re-used on remodeling jobs, do not use a wrecking bar. Remove trim by using a 3/32 inch pin punch. Use pin punch like a nail set, and drive finishing nails clear through trim. This does not split trim. —Submitted by W. A. Woodard, Volga, So. Dak.

How Hammer can Act as Shingle Gauge



DRIVE a 16 penny nail into the head of hammer for a short distance and then bend the balance of the nail so it lays parallel with the head of hammer. In this manner an emergency shingle gauge can be made in a hurry. The distance from the head of the nail to the head of the hammer should equal the distance that the shingles are laid to the weather.—L. B. Ferguson, Haskell, Texas.

How to Mark Trim



WHEN marking trim or cabinet work a fine line is sometimes required. This can be obtained by replacing the lead in an automatic pencil with a darning needle. When not in use the point can be retracted in the same manner as lead.—Submitted by Albert Keebler, Ryan, Iowa.

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No. G-7 . . . Store Interiors

IN PREVIOUS issues the detail plate has covered the construction and design of store fronts of both new and remodeled structures. In this month's detail plate (opposite page), the interest is centered on the design and construction of a combination bag and hosiery department in the interior of a modern shoe store. This department is an integral part of the store fixture arrangement, and yet it is an individual and distinctive sales unit placed toward the front of the store.

Bags which are a good tie-in item with shoes are shown prominently displayed on plate glass shelves in the 5 foot 6 inch high open case in back of counter. The lighting for the bags is provided by vertical fluorescent light strips placed in front of the vertical division bars of case.

The wrapping counter sides and front are covered with Marbelia wallpaper in shades of black, aqua and chartreuse. The upper portion of the bag showcase adjoining is made of mahogany finished natural. The lower portion of this case is constructed of oak sides with oak trim around the Weldtex panel front. The Weldtex panel in this case is lacquered a glossy black.

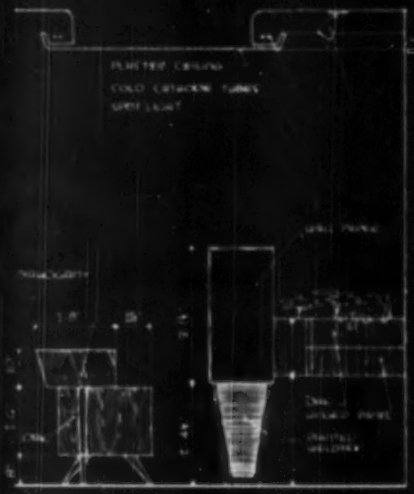
The bag wallcase is constructed with an oak frame with lacquered interior and Marbelia wallpaper on ends and back. The wallpaper colors are turquoise and gold. The supports for this case are also of an oak frame with inserts lacquered black. The connecting flower box between the back of case and the wall is constructed of oak with hinged panel on face.

The walls of the store are painted an aqua shade with the ceiling in chartreuse. The dropped portion of the ceiling is a greyish orchid. The floor covering is a sculptured carpet in a light greyish-green color.

AMERICAN BUILDER'S STORE FRONT DETAILS

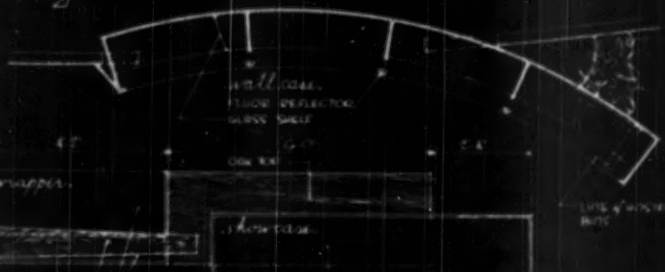
Designed and Detailed by Louis J. Gluskin for *American Builder*

No. G-7 · STORE · INTERIORS ·



End Elevation

Marilyn Shoes N.Y.C.



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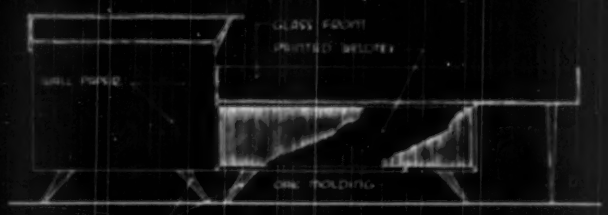
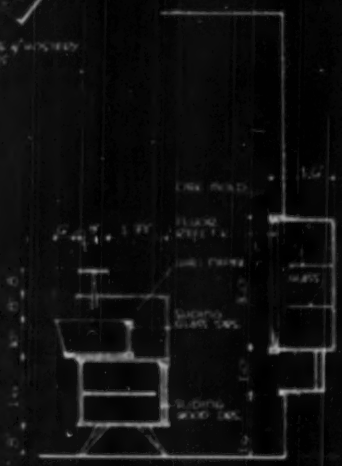


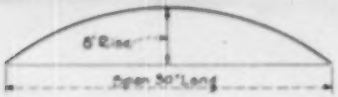
Front Elevation



Section

TECHNICAL GUIDE for Builders and Craftsmen

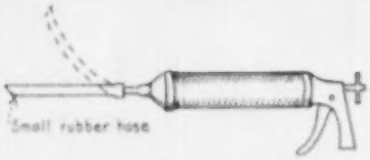
How to Lay Out an Arch



HOW to determine the radius of an arch when the span and rise are given.

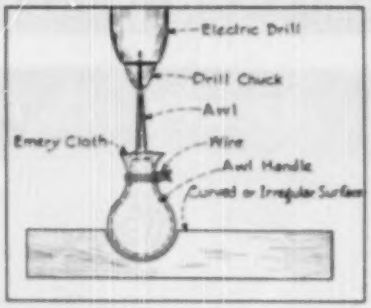
1. Multiply one half of the span of arch by itself—15 inches by 15 inches equal 225 inches.
2. Divide the above sum by the given rise, 225 inches divided by 8 inches equal 28¼ inches.
3. To the sum of No. 2 add the given rise, 28¼ inches plus 8 inches equal 36¼ inches.
4. Divide the sum of No. 3 by two, 36¼ inches divided by two equal 18 1/16 inches, which is the radius required to strike this arch.—Submitted by James Hill, Guelph, Ont., Can.

How to Make a Caulking Gun Extension



IN CAULKING around portions of the exterior of a house there are places that are difficult to reach with the point of the gun. In such cases an extension may be made from a section of small rubber hose which is of suitable size to slip over the metal point of gun. The point of the rubber extension may be cut off at the same angle as the metal point of gun.—Submitted by Arthur N. Nelson, Kansas City, Mo.

How to Sand Curved Surfaces Quickly



THE QUICKEST way to sand curved or irregular wood surfaces is with an electric drill and a discarded awl. Wrap a 6-inch-square piece of emery cloth tightly around the handle of awl and hold it in place by wrapping wire around handle. An inch or two of the awl point is cut off so it can be held more securely in the drill chuck. In use start the drill and tilt from side to side while applying pressure at the same time. The emery cloth can be quickly replaced.—Submitted by Herbert E. Fey, New Brainfels, Texas.

How to Prevent Hammer Marks on Finished Trim

TO PREVENT damage to finished trim from hammer marks when driving finishing nails into casings take a ¼-inch-thick scrap piece of plywood 1½ inches wide by 5 inches long to act as a guide. Bore a ¼-inch diameter hole ¾ inches from each end so plywood can be placed over nail while driving.—Submitted by Albert Keeb'er, Ryan, Iowa.

HOW TO DO IT • HOW TO DO IT • HOW TO DO IT • HOW TO DO IT • HOW TO DO IT

No. D-66 . . . Details of Open Carport

WHERE climate conditions permit, an open carport offers an economical solution to the problem of car protection. It also can be classified as a multiple use area during the day when the carport is available for outdoor recreation for both children and adults.

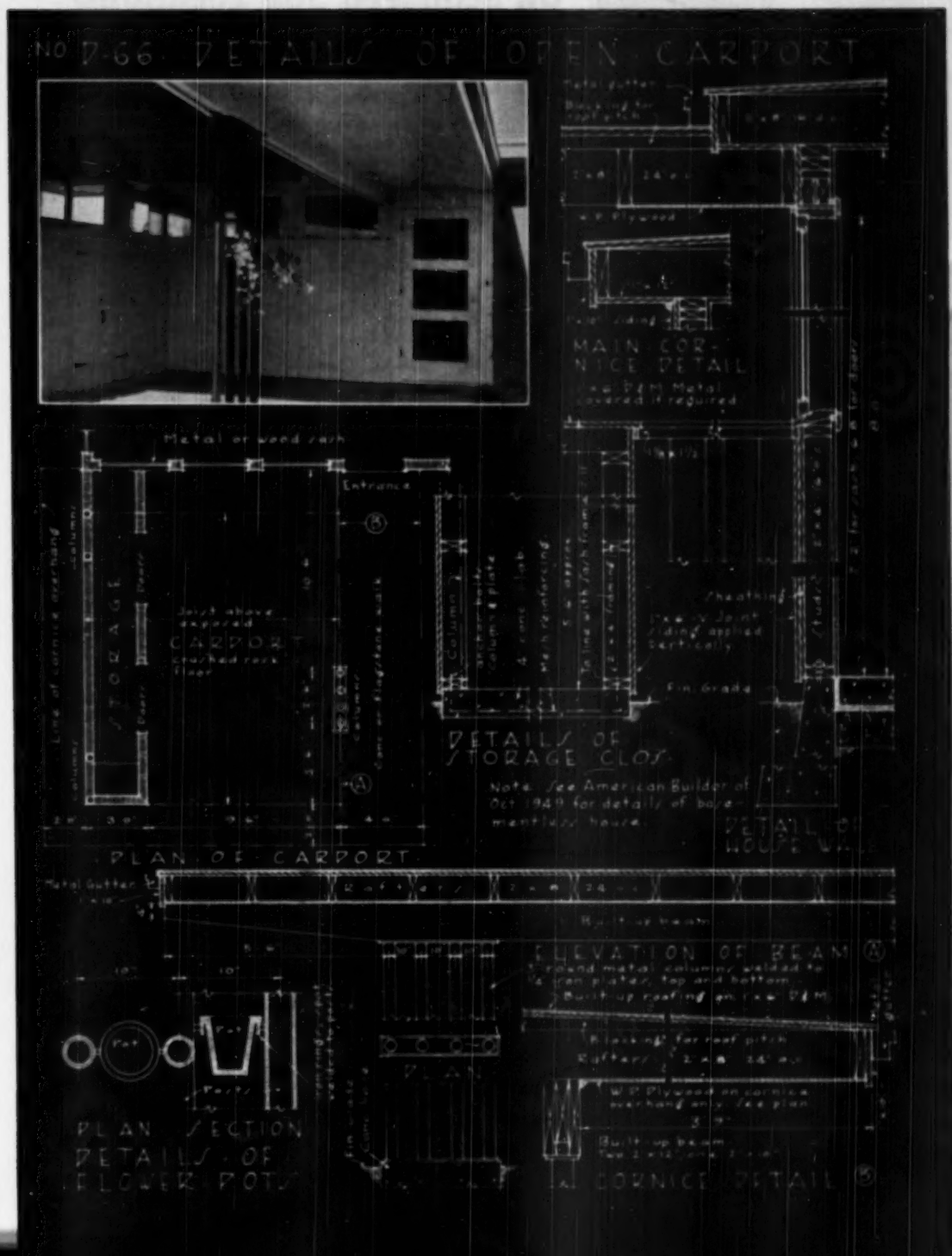
A study of the detail plate on opposite page will indicate that a feature of this type can be made integral with and a complement to the design of the house. A battery of storage units which extend from floor to sill of window on adjoining wall of house forms one wall that protects the carport area during inclement weather. Cast iron columns extend through storage units to floor to support ceiling joists. The opposite side is entirely open, joists being supported by a double wood beam which in turn is supported by a battery of four cast iron columns embellished with brackets supporting flower pots. A pleasing arrangement is the extension of carport roof to provide a sheltered walk to front entrance door. The soffit of this extension is finished with plywood while the ceiling joists of carport are left exposed and painted a deep contrasting color.

A concrete base and floor are provided for the storage units and floor to front entrance. Balance of the floor of carport is gravel. The finished surface material of storage units and an adjoining wall of house are of 4-inch M&B vertical boards. This and other methods of carport arrangements have been successfully used by Edward B. Hawkins, designer and builder of a development of 35 houses in Denver, Colo.

How-To-Do-It Pointers Continued on Page 130

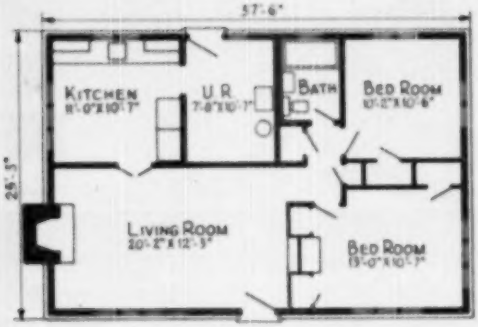
AMERICAN BUILDER'S BETTER DETAIL PLATE

Detailed by R. J. Alexander for *American Builder*



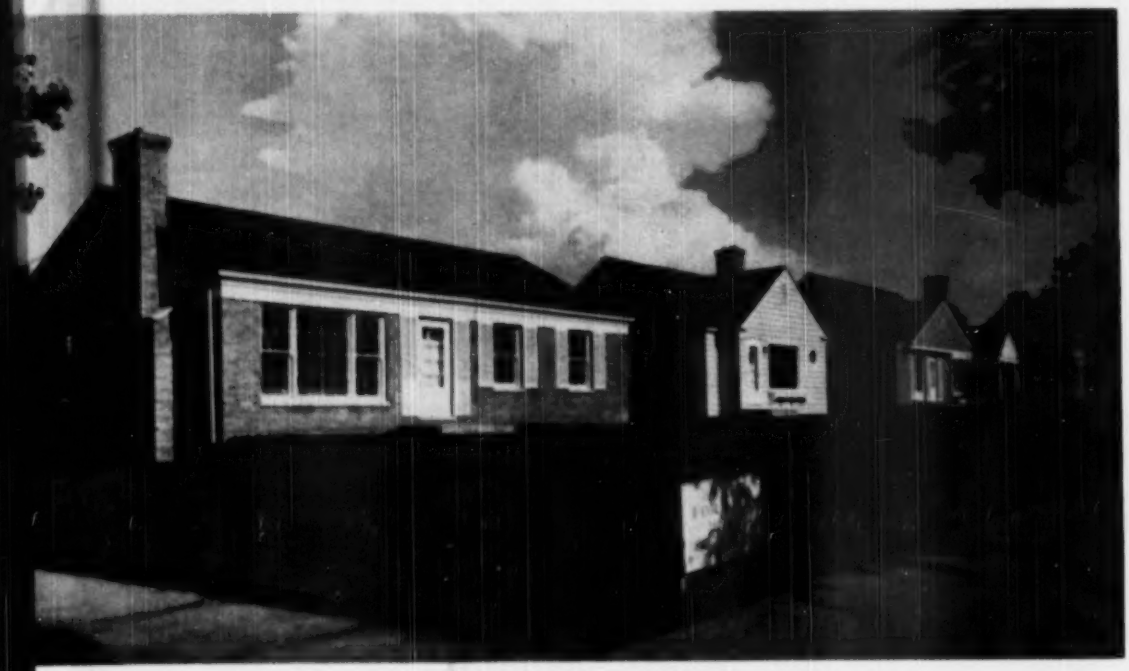
Are Power Tools Profitable On Scattered Job Locations?

An emphatic "yes" is voted by members of this firm who specialize in quality-built homes and take pride in their work



FLOOR PLAN

POWER sander, above, is well taken care of in the hands of Henry Fredericks, veteran craftsmen with Maxon Construction Co. This firm finds that one power hand saw saves from four to eight man hours per day, and that efficiency of power tools depends largely on how well they are used and cared for



TWO-BEDROOM homes, conventionally built by Maxon company, sell for $11,000 in Barrington, Ill.

WHETHER you build several homes in one block, or one house in every four—power tools can save money.

This is proved in the experience of the Maxon Construction Co., Barrington, Ill. Of 41 homes completed last year (25 for sale, 15 on contract), most were on widely separated lots, which meant transporting of tools and equipment from one job to the other. This firm emphasizes quality construction, and conventional building methods throughout. But the use of power hand saws, a table saw, an impact hammer and other power tools and equipment is profitable—though no prefabrication methods are employed, and little work is done in a shop. The tools, the firm says, make profits through their own productivity, and because they are handled properly.

A power hand saw, for instance, can average a savings of from four to eight man hours per day. A comparative savings is made through the use of other power tools.

How power tools save time and make money, says D. C. Maxon, head of the firm, depends largely on the men who use them, and ultimately on the organization of the building firm itself. Maxon employs more foremen in the field than usual, usually one in charge of each phase of the operation as well as one general foreman who goes around on the job. He carefully screens employees before they are hired, and believes in delegating authority. Through this policy he has steadily built up a crew of workmen who take pride in their work and the tools they work with. Any foreman on the job is capable of handling all the construction details of the house he is assigned to. Five carpenters usually work together as a crew, and one of the five uses a power hand saw to do all the cutting and layout work necessary for the other four. On smaller jobs, two men work together with one handling a power hand saw.

Storage of tools is important to Maxon. An office, recently completed, has provisions in the rear for orderly storage. Bins, plainly marked, are built along one complete side of a large room used as a shop. The office is one of the most attractive in the immediate area.

In homes built to sell, Maxon uses about 15 different floor plans and about 45 different elevations. The designs are re-used, but always in different neighborhoods to avoid monotony of design. Working with D. C. Maxon is his brother, Norman, an architect, who also estimates all jobs. The general superintendent is Andrew Bjornberg, and field co-ordinator is George Kinimonth.

TABLE saw with shaping equipment

POWER TOOLS USED

Skilsaw, Inc., power hand saws

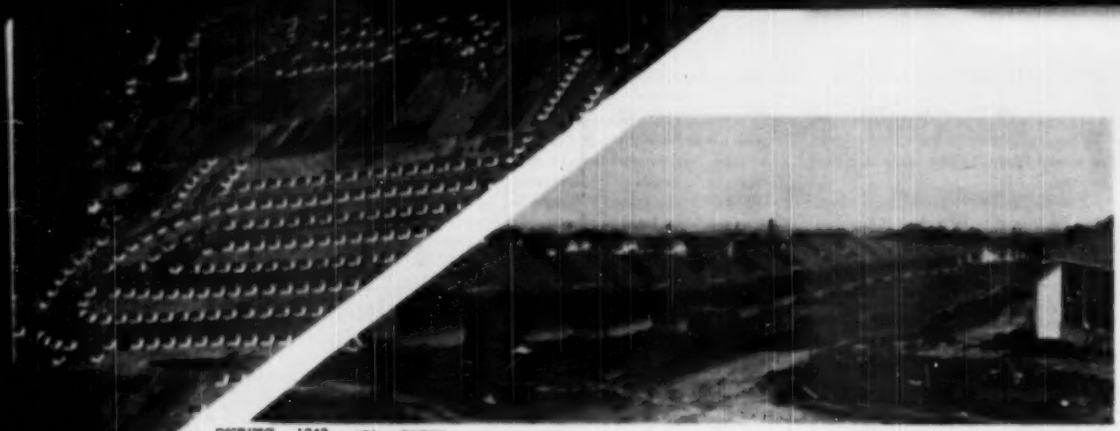
Rockwell Manufacturing Co., Delta saw

Skilsaw, Inc., drills

Skilsaw, Inc., sanders

The Syntron Co., impactor hammer

BESIDES having attractive front, the rear of this office has shop with neatly arranged storage bins for power tools



DURING 1948, one power shovel was used principally for trenching and the second was used almost exclusively for basement excavating on the Timely project of 500 houses

Own Your Own Equipment

Is the advice of a builder whose accurate cost and progress records over a period of months show faster job operations

A HEAVY crawler-type tractor pulling a dirt carrier moves on tract to start work

ONE of the builder-owned and operated power shovels starts the first basement

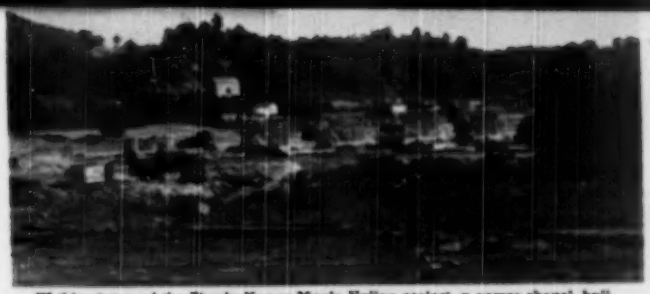
A 50 per cent saving in excavating, dirt moving and project costs because he owns and operates his own power shovels and bulldozers instead of subcontracting the work is claimed by Stephen Dudiak, president of Timely Homes, Inc., of Clifton, N. J. This large and well-known community development firm erected and sold 500 houses each year in 1948 and 1949. Plans call for at least 500 more this year. Price range has always been under $9,000 until this year when the range is being boosted to $10,500 with a few at $12,500.

Light power tools and equipment have always been popular with the Timely firm because of the attributes of speed and economy which they brought to each job. It was only four years ago when the first move to acquire a layout of heavy equipment was made. Since then two power shovels, two bulldozers, ten electric power generators and three mortar mixers have been added to the array of power carpentry and building tools. This year Dudiak is planning the purchase of three pavement rollers, another bulldozer, two motor graders, a black top paver, several heavy trucks, a low-bed trailer, a cement finishing machine and a water pump.

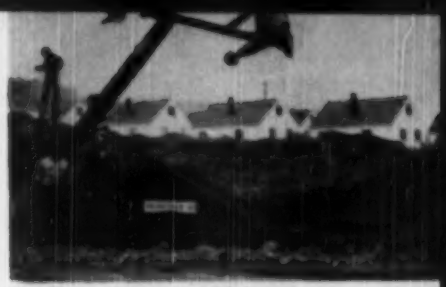
Dudiak manages his power shovels so that he is able to liquidate the cost in 12 to 18 months. To do this the machines must be busy practically all of the time. In the last year the two shovels operated by Timely were on the job consistently with one digging basements and the other digging trenches, curbs, and similar work. One ¾-yard shovel was used to dig an average of four 24 x 30-foot basements every day. Some weeks it was

WITH excavating and utility installation work under way, trucks haul dirt away

PNEUMATIC hammers are used to break up pavement or rock formations



IN this picture of the Timely Homes Maple Valley project, a power shovel, bulldozer, building materials truck and tool truck can be seen in use at same time



POWER shovel operator and helper pose for photo beside the 32ft excavation

necessary for the shovels to work Saturdays and Sundays to keep ahead of foundation crews. Bulldozers likewise are kept going at maximum most of the time. One bulldozer was worked more than 4,000 hours in 1949 with a good deal of Sunday and overtime work included.

One of the biggest points of saving with ownership and operation of dirt moving equipment under direct control of the builder is in co-ordination of work, thus saving many hours by avoiding delays common when such work is sublet. Dudiak is very emphatic in his conviction that much more efficiency can be achieved on any operation by the builder having complete control of excavation and grading work. All crews can be kept going at full speed, especially the foundation and framing crews.

In the case of Timely Homes, the firm does work on a contract basis for the public utilities where it is necessary on the Timely project. Excavations for the installation of water mains, sewers, gas lines, underground power lines and other work of that type are handled much more efficiently and in much better co-ordination with the over-all job on the development when the builder can handle dirt moving and excavations for the utilities. Dudiak can afford to do this type of work for the utilities at closely figured prices because of the savings he can achieve in expediting his whole project.

The size of the Timely operation makes the use of the heavy dirt-moving equipment a profitable undertaking. Questioned as to what he considered the minimum volume a builder should have to operate dirt-moving equipment—a bulldozer, for example—Dudiak expressed the belief that any home builder who erects 100 or more average houses a year should have at least one bulldozer of his own on the job.

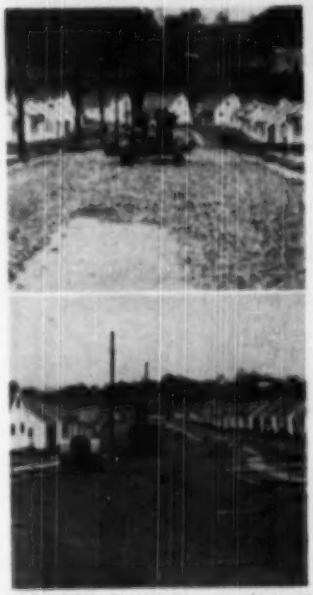
He feels that electrical generators are much more valuable as time and money savers than most builders realize. Any builder erecting 50 or more houses a year should have at least one generator, according to Dudiak. A generator was one of the first pieces of heavier power equipment which the Dudiak firm purchased four years ago. Experience since that time has convinced Timely that they are essential because wherever they work now they use electrically-powered tools and so must have power. In most instances when they first arrive on the job, anxious to get started, there is no power line to tap. That is when a generator is wheeled in and work starts under electrical power. If this cannot be done, all the power tools cannot be used to maximum capacity. The firm now operates ten electrical power generators.

This spring Dudiak established his own ceramic tile application firm and equipped the crews with power tools for cutting and shaping the tile. This setup was inaugurated so that he could have complete control of the tile setters and have them on his jobs when they are needed.

A woodworking shop where framing is precut and some assembly work done is maintained on the site. Except for the extensive precutting of house parts, all the work is conventional on-site construction. About 200 men are employed with two superintendents responsible for production on schedule.

The houses are frame with full basements in two and three-bedroom models. The model which was built in volume last year sold for $8,990 on a 50 x 100-foot lot, without a garage. Heat is supplied by a forced warm air, oil-fired unit.

This year's two-bedroom model is larger and designed more along ranch-type lines. The price is $10,500



ALTHOUGH Timely Homes sublet all pavement work up until 1950, equipment shown here working in the project last fall was on the list for purchase by this builder so it would be on hand for use in completing 500 or more homes in 1950

ONE of the two bulldozers owned by Timely Homes at work in mud early this spring. One bulldozer, on which time is kept, worked over 4,000 hours in 1949

TIMELY operates two units like this. One of them is ½-yard and the other ¾-yard

STEPHEN DUDIAK, president of Timely Homes, considers these generators some of the most useful power units he has on the job. At present Timely operates 10 generators, varying in capacity from 2,000 to 10,000 watts. They are brought on each job to permit use of electrically-powered tools as soon as possible

on lots varying from 60 x 110 to 75 x 110 feet. The three bedroom model is priced at $12,500 on the same lots, and includes a garage. Heat for these units is forced warm air, oil-fired. A gas kitchen range is also included in the sale price of this year's models. Floors are oak throughout except in the kitchen where linoleum is used and in the bathroom where floors and walls are tiled.

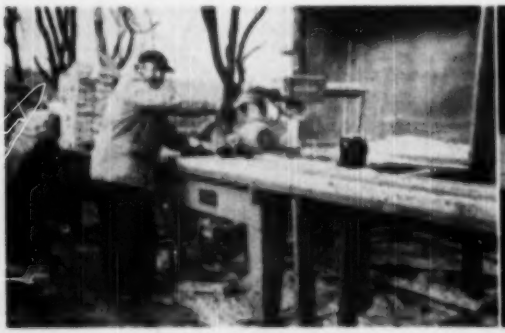
Windows are metal casements. In the first models erected this year the large picture window in the living room was 6 feet high and 9 feet long, made up of nine 24 x 36 inch units. The floor-to-ceiling window in the front of the house drew so much criticism from prospective purchasers that after several months the three lower window units were eliminated to make the over-all size about 4 feet high by 9 feet long.

Interior walls are plastered over gypsum lath. Trim is colonial and doors are the slab type. All units are fully insulated throughout.

BRANDED PRODUCTS USED IN TIMELY HOMES

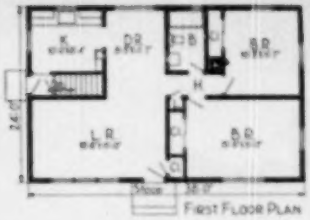
American Radiator & Standard Sanitary Corp. plumbing fixtures
Briggs Manufacturing Co. plumbing fixtures
Cedarwall siding shingles
Gilman Brothers Co. Cellulite insulation
Lightolier Co. lighting fixtures
Kohler of Kohler plumbing fixtures
Reading Hardware Corp. hardware
Rex automatic hot water heater
Ro-Way garage doors
Simplex windows
Superfex oil-fired forced warm air furnaces
Texaco asphalt shingles
Thatcher oil-fired forced warm air furnaces
Victor kitchen ventilating fans
Youngstown kitchen cabinets

EXPERIENCE on this job has proved that one man operating one of these powered mortar mixers will do work equal to that of three men mixing by hand on the job

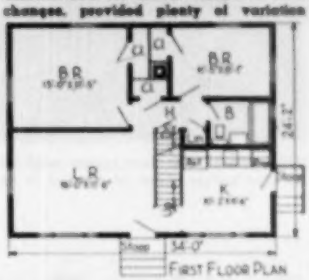


THREE bench saws and 20 power hand saws are operated by this firm. Although the houses are conventional frame construction, most of the cutting is done in an on-site woodworking shop, from where precut units are hauled to foundations for assembly

STEPHEN DUDIAK, president of Timely Homes, has built houses for 20 years

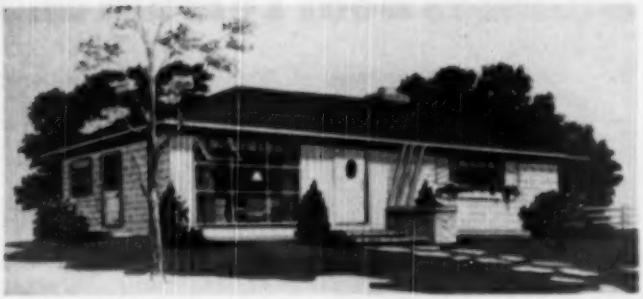


THIS is the popular $8,900 model which was built almost exclusively last year by Timely Homes. These houses, designed by Stanley A. Lock, Dumont, N.J., had ten different front elevations, which with color changes, provided plenty of variation



Heavy Equipment and Power Tools Owned by Timely Homes

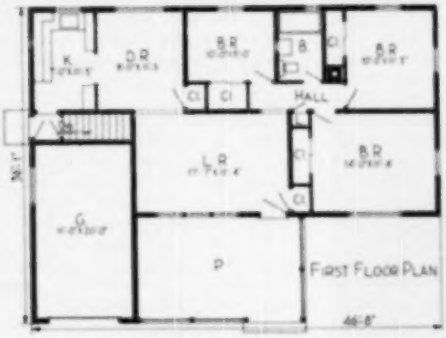
SHOVELS
1 Link Belt Speeder, ¾-yd.
1 Link Belt Speeder, ½-yd.
BULLDOZERS
1 Allis Chalmers
1 Caterpillar
TRUCKS
3 Dodge 1-ton
3 Dodge ½-ton
1 Studebaker Buck 1½-ton
1 Brockway 5 ton
GENERATORS
3 Homelite, 1,000 to 2,500 watts
7 Onan, 3,000 to 10,000 watts
1 Army surplus
MORTAR MIXERS
2 Jaegers, 1 bag mortar
1 Kwik Mix
SAWS AND WOODWORKING EQUIPMENT
20 Porter Cable Speedmatic powered hand saws
3 Skilsaw bench saws
1 Delta bandsaw
1 Delta planing machine



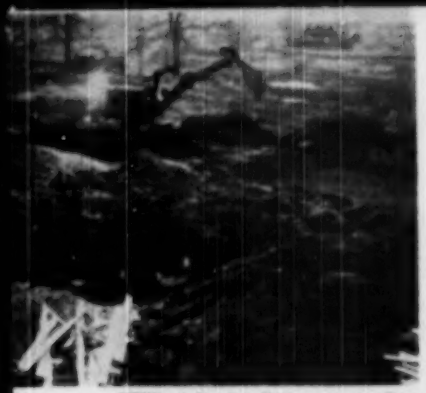
RENDERING and floor plan of the new $10,500 model which will constitute the bulk of the 1950 effort for Timely Homes. There are five different elevations and roof arrangements to give variety in appearance. Rudolph L. Novak, is architect

As projected early in 1950, TIMELY HOMES PLANNED TO BUY the following equipment th's year:

1 White dump truck, 7½-ton
1 GMC dump truck, 4½-ton
1 Chevrolet pickup truck, ½-ton
1 Huber roller, 10-ton
1 Huber roller, 3 to 4 ton
1 Buffalo roller, 5-ton
1 H. D. 7-W Allis Chalmers bulldozer, 12-ton
1 low bed trailer, 4-ton
1 Adnum black top paver, 10-ton
1 Warco motor grader, 6-ton
1 model 112 Caterpillar motor grader, 12-ton



PUTTING the roof on one of the $12,500 ranch-type models which includes a garage. This house was also designed by Novak. Timely Homes at present plans the construction of only a few of these in 1950



VIEW of Huntley Estates terrain, Eastchester, N.Y., showing adverse soil and rock conditions which presented challenge to builder in attempt to keep cost down

SHOWING result of underground water conditions flooding crawl-space excavations when freezing weather forced the abandonment of slab construction

NOTE steep pitch of roof necessary to conform to local code demanding minimum 22 feet from top of first floor to ridge

THE concrete slab floor system used for the first houses shown above had to be abandoned in favor of regular foundations with crawl spaces so that work could

Builders Beat Terrain and

TO successfully bring the economies of volume medium-priced home construction into a market which has been traditionally high priced and necessarily keyed to high income buyers is an achievement of no small proportions being demonstrated in the Huntley Estates project in Eastchester, N.Y. In the face of high land development costs along with rigid code and zoning regulations, Edward J. Tobin and Mac Welson are currently engaged in building a community of about 275 homes in the $12,500 to $16,250 class on the former Hickory Country Club golf course in Westchester County.

One of the biggest factors in the high cost of home building in the Westchester area is the rough land. Top soil is heavy clay underlaid with ledges of rock running from a few inches to many feet in thickness. In addition to this, underground water near the surface is always a hazard to building. Part of the plan of Tobin and Welson is to eliminate all unnecessary costs and to hold others to the minimum without sacrificing quality. In conformity with that policy they decided to erect only basementless houses, thus saving the cost of expensive excavations.

When work was started at Huntley Estates late last fall, the houses were set on concrete slabs with circulating hot water to provide a combination of perimeter radiant and recessed convector heat. The copper piping to convectors is laid in each slab around the perimeter to heat the outside edges of the floor. In these houses hardwood flooring is laid on screeds set in mastic on the concrete floors. The slabs are built up with six inches of gravel, a one-inch layer of concrete, two layers of felt, mopped with tar, rigid insulation around the perimeter underneath for two feet and vertically against the foundation. The copper heating pipes are laid above this and then the finish four-inch reinforced slab is poured.

Because of the impracticability of laying concrete slabs on wet frozen ground, the system was abandoned during the winter months. Instead, footings for a regular foundation, without basement but with a 30 to 36-inch crawl space were adopted so work could proceed without serious interruptions. Conventional wood floor joists, with subflooring and a finish floor of hardwood or asphalt tile over plywood are used. The hot water heating pipes from the furnace

To bring the economy of volume medium-priced home construction to a market geared to high costs and prices involved solving many knotty problems in preparing difficult terrain to meet rigid code restrictions

proceed during winter months when slabs could not be poured over frozen ground

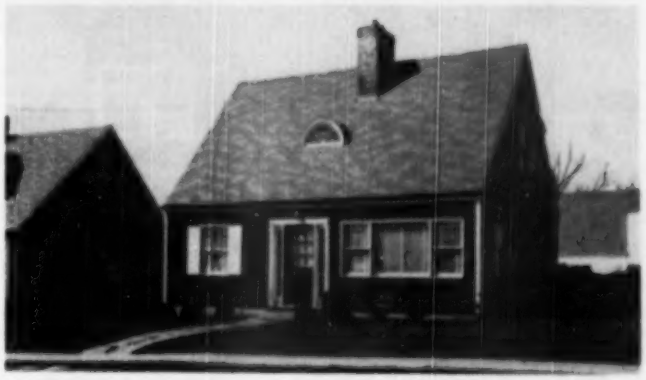
ROUGH-graded street indicates rock conditions that had to be coped with in all grading

Weather

to the convectors are run around the perimeter of the house under the floor. This plan still retains some of the features of the perimeter radiant system which was used in the slabs.

The ground under the crawl spaces is being sealed with two inches of black top. Directly under the wood floor there are 4 inches of mineral wool insulation with a processed paper moisture barrier under that.

Despite the decision to build only basementless houses, the excavation and land preparation costs in this tract are running excessively high. When there were about 75 houses finished or under construction, more than $200,000 had been spent on excavating, rock removal and earth hauling on the entire project. One stretch of street about 150 feet long on a side hill was so heavily loaded with solid rock that before it had all been removed and the street graded ready for finishing a total of $8,000 had been spent. Tobin has figured that each lot in this development will average about $2,650 in cost, including $800 original land cost, plus the following: storm and sanitary sewer; sewer laterals (no home can be erected in this area unless sewers are installed); cast iron pipe; grading

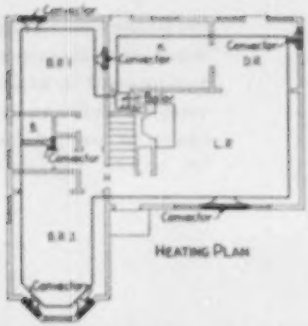


Two more variations of the models being erected in Huntley Estates

THE COMPACT Janitrol gas-fired hot water boilers are placed in small closets adjacent to the kitchens where they are out of the way but still easily accessible

and finishing roadway; installation of dry wells (roof runoff water cannot be drained on the ground or into sanitary sewers); grading the lots; excavating and back filling; removal of excess trees; water and gas trenching; finishing roadway and installing curbs. Lots run in size from 50 x 100 to 82 x 100 feet.

There are five different houses being built in the development. The two-bedroom $14,240 model with an unfinished second floor is the most popular. Second in popularity is the three



LAYOUT of ¾-inch copper hot water pipes laid around perimeter under the floor so that outside edge of floor is heated while pipes are carrying water to recessed convectors

bedroom, one-and-one-half bath model priced at $16,240. There are five model houses open for inspection of prospective purchasers. There is a good variety of exterior finishes used including wood siding shingles, asbestos cement siding shingles, bevel siding, brick and stone veneers. Asphalt shingles are used on the roofs.

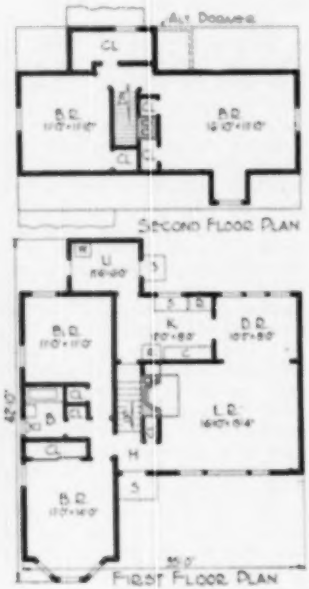
Interior walls are finished with the gypsum board dry wall method and are papered. A washable wall covering is standard in the kitchens and on bathroom walls above the ceramic tile wainscoting. Glazed ceramic tile is also used on the bathroom floors. A plus feature in bathrooms is the installation of two small wall chests instead of a single large one. This gives the user two mirrors which can be swung in combination to various positions to obtain different views.

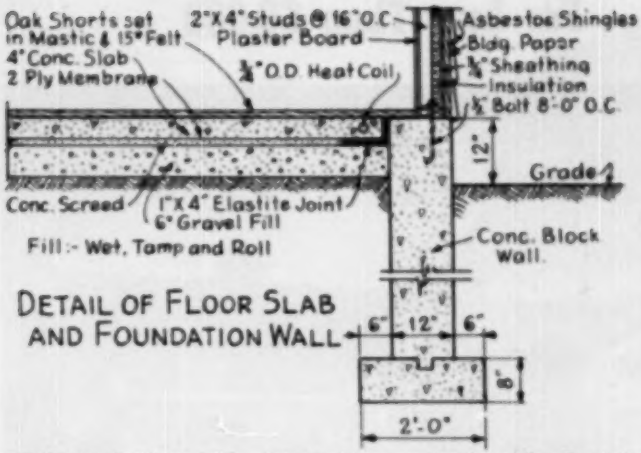
Linoleum is standard on kitchen floors. Counter tops are Formica. A ventilating fan, built-in upholstered breakfast nook seats and a table with Formica top are included in all houses. Each kitchen is fully equipped with an eight-foot electric refrigerator, a gas range and an automatic laundry. Purchasers have their choice of colored kitchen cabinets, bathroom tile and wallpaper. Lightolier's Lightronic controlled lighting, which gives the owner a choice of various degrees of lighting brightness, is a feature which is popular with home purchasers at Huntley Estates.

Heated water for the forced circulating convector system, as well as the water necessary for bath and laundry requirements, is supplied by Janitrol Triple Service Heat Generators. These gas-fired units were selected by Tobin and Welson for all houses in the project and were purchased on a single contract. This method of buying is responsible for many of the savings represented in the prices of these houses.

In all models, except the two-story, the attic area is unfinished. A built-in stairway, subflooring, stubbed heating and plumbing pipes, electrical wiring and plenty of windows make it easy and economical for the purchaser to convert the unfinished attic into additional living quarters. The

This two-bedroom, single-bath house with an unfinished attic is priced at $14,240. All houses in this development have completely equipped kitchens





DETAIL of the foundation and crawl space under a conventional wood floor. Four inches of mineral wool insulation and a processed paper moisture barrier are placed under the floor. The ground under the crawl space is sealed with two inches of black top

TYPICAL kitchen showing range, refrigerator and upholstered breakfast nook seats with formica-topped table which are standard equipment in these houses

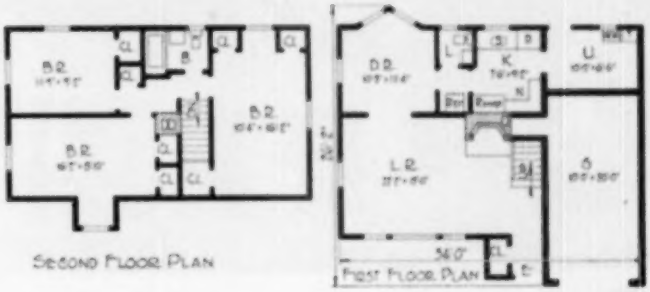
upstairs, or unfinished attic areas in these story-and-a-half houses, are unusually spacious because there is a building code in the municipality which specifies that each single-family residence must measure at least 22 feet from the first floor level to the top of the ridge. This makes the pitch of each roof very steep.

Sale prices of the houses include a hard-surfaced driveway when there is a garage. Basic shrubbery is also planted by the builders.

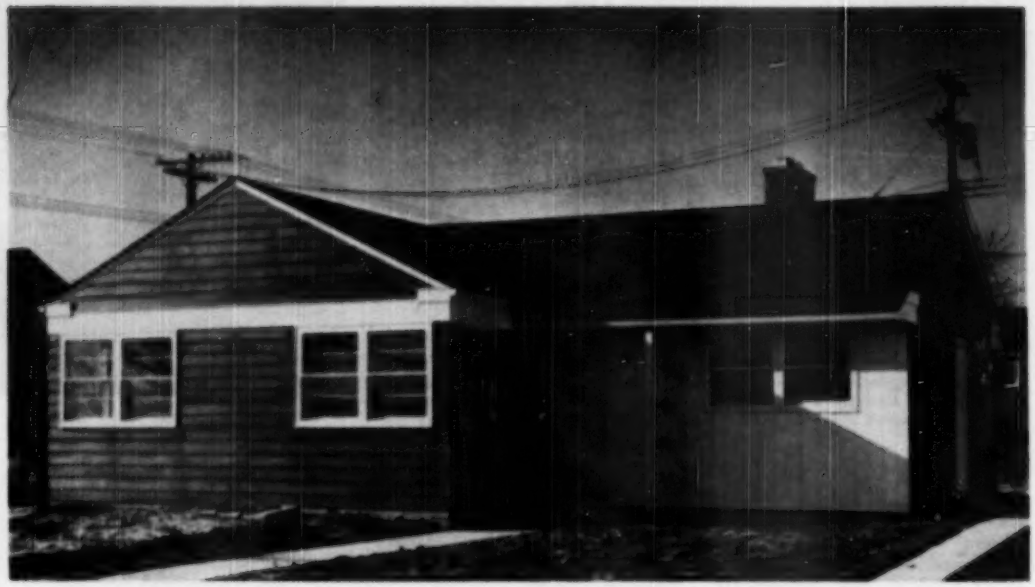
TWO-STORY, three-bedroom house with bath and a half in Huntley Estates, priced at $16,240, on lots varying from 50x100 to 82x100 feet. The price includes the basic shrubbery shown and a hard-surfaced driveway. Melvin E. Kessler is the architect

BRANDED PRODUCTS USED IN HUNTLEY ESTATES HOUSES

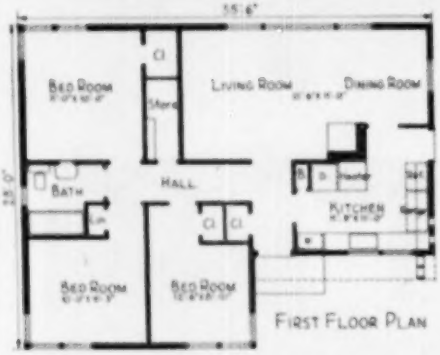
- Armstrong linoleum
- Bell & Gossett circulating water pumps
- Cedarock siding shingle panels
- Chase copper piping for plumbing and heating
- Cokor Corp. dinette sets including tables
- Flintkote asphalt shingles and asbestos siding shingles
- Formica counter tops
- General Electric 8-cubic-foot refrigerators
- Imperial wallpaper
- Janitrol gas-fired hot water boilers
- Kentile asphalt tile
- Lennox wallpaper
- Lightolier lighting fixtures
- Lockport cotton insulation
- Master Woodworker kitchen cabinets
- Minneapolis Honeywell furnace controls
- Revere copper piping for plumbing and heating
- Richmond Radiator plumbing fixtures
- Royal Rose gas ranges
- Sanitas wallpaper
- Schlage hardware
- Tagco hardware
- Unique sash balances
- USG asphalt shingles and gypsum board
- United Metal Co. hampers and bathroom cabinets
- Universal convectors
- Whirlpool automatic laundries



Prize Winners — For Less Than $9,000



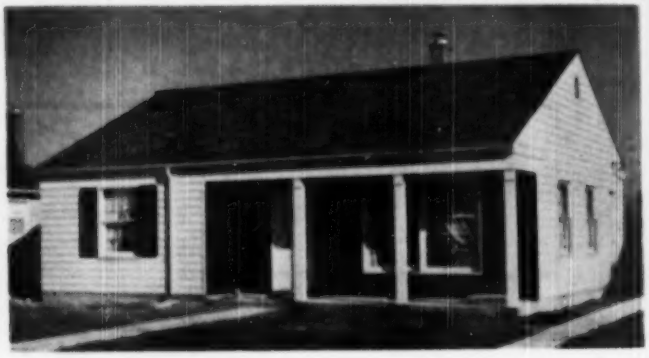
Most attention at Michigan builders competition was given to this three-bedroom Robertson home. Floor plan, below



First place in an architectural competition open to Michigan home builders is awarded to three-bedroom homes that have ample storage and an attractive price tag

American Builder Selected Homes

FOUR floor plans with three elevations for each are used in Robertson project



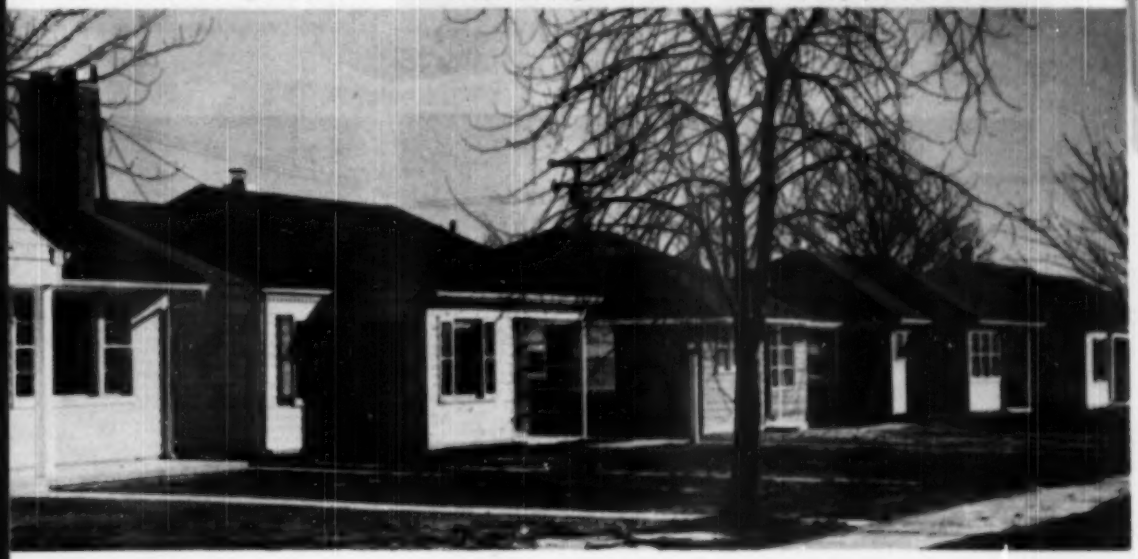
HOMES offered in the 105-house Woodward Hills development, Royal Oak, Mich., won first prize in an architectural competition sponsored by the Michigan Association of Home Builders for their builder members. The winning homes have three bedrooms and radiant heat, and are priced at $7,950 to $8,400, without lot.

The basic plan in the project has a center entry hall leading to the living and dining rooms at the rear. The living room has large picture windows and a french door opening out to a future rear terrace and garden. Adequate closet space is provided, and additional storage space is available in a floored attic reached by a disappearing stairway. A corner fireplace is located at the wall of the living and dining rooms.

Robertson Brothers, the Royal Oak builders who developed the project, enclose a home in two days, then pour a 4-inch concrete slab floor in which ½-inch copper pipes for radiant heat are imbedded 12 inches O.C. A trench is dug to frost line; then an 8-inch foundation wall is poured to within eight inches of finished grade level. One 8-inch concrete block is placed on top of the foundation wall to bring it up to grade level, then an L-shaped concrete block (designed by Covert Robertson, Jr., senior member of the firm) is placed above that. This block is 8 x 8 inches, with 4 inches taken out of one corner to provide a base for the plate and support for the edge of the floor slab. After the foundation is poured and concrete blocks laid, conventionally framed exterior walls are built, and rough framing proceeds until the house is under roof.

To conserve floor space, a Van Packer chimney is used in several of the homes. The radiant heating system installed was designed by the Robertson Brothers, who use panel lines of identical length. With their system, they say, heat loss and resulting temperature drop in each line is identical. Oil and gas fired automatic York Shipley boilers, manufactured by York Shipley, Inc., are used.

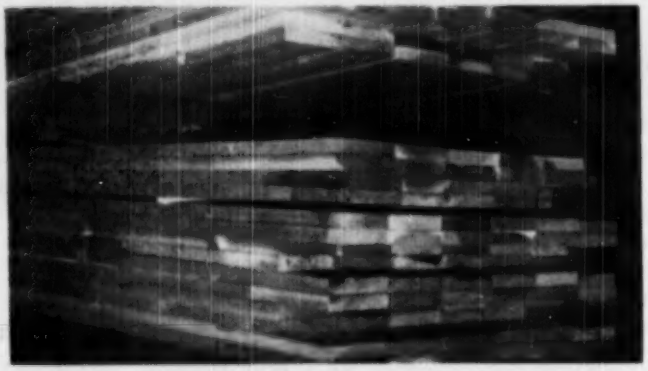
ROBERTSON homes have varied exteriors. Note Van Packer Chimney



Lumber Company

◀ 1.

LUMBER at Hines yard in Chicago is stacked so that ends are staggered, enabling lift truck to raise one end of any number of boards required. Ross lift is shown in first stage of lifting operation

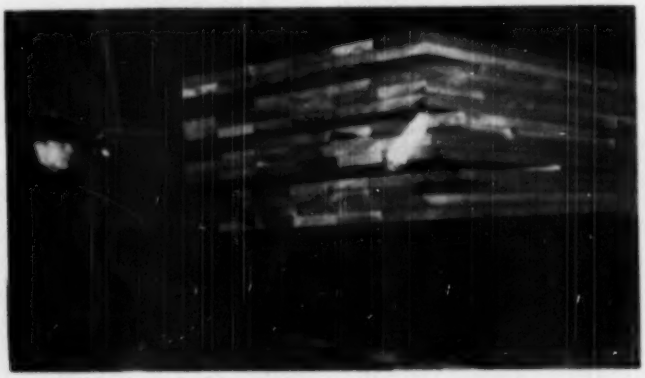


▲ 2.

AFTER one end is raised, a 2x6 is inserted to hold the lumber up until lift truck moves around into position to insert forks under center of load. The operation requires two men and lift truck

HOW power equipment saves time and money for the lumber dealer was graphically demonstrated recently in Chicago at the Edward Hines Lumber Company yards. A program sponsored by the Hines company permitted more than 100 lumber dealer guests to see firsthand some of the most advanced methods of material handling. Though the Hines yard is one of the largest in the country, handling equipment demonstrated is adaptable to both large and small yards, and visiting dealers felt their time was well spent at the program.

In the first part of the demonstration, dealers saw a modern lift truck at work, moving lumber inside a Hines shed built to provide ample room for the free movement of lift and straddle trucks. An ideal shed for this power equipment, manufacturers say, is one with roof trusses where four walls support the roof and no intermediate posts of any kind obstruct the floor level. In the Hines shed, dealers saw a lift truck move at rapid speed, lifting unit loads of lumber, carrying it to a destination, and deftly placing it on top of a high lumber pile or on the ground as though it weighed no more than a pound. The Hines company stacks the lumber (see photographs) so that a



▲ 3.

BOARDS are aloft here. Entire operation takes only a few minutes. More than 100 lumber dealers watched demonstration, illustrated here, sponsored by Hines Lumber Co., at their Chicago yard

STEEL strapping device draws high tensile steel strap around unit of lumber, and firmly secures it at Hines demonstration

Demonstrates Materials Handling

Retail lumber dealers turn out en mass to see how power equipment is used to cut cost in a modern lumber yard

lift truck can approach a pile of lumber and take any amount desired at one time.

In the second part of the demonstration, dealers saw how high tensile steel straps are used to hold lumber units together, making it easy for one man, by means of truck transport, to move them around a lumber yard and to unload them in one single unit instead of in separate unmanageable pieces. It was shown how boards can be unloaded at their destination without loss of time or lumber breakage; how bundles prepared in the lumber yard provide advantages for the customer and will not be pilfered while idle on his property, and how the bundles will not be dangerous to curious children exploring new buildings.

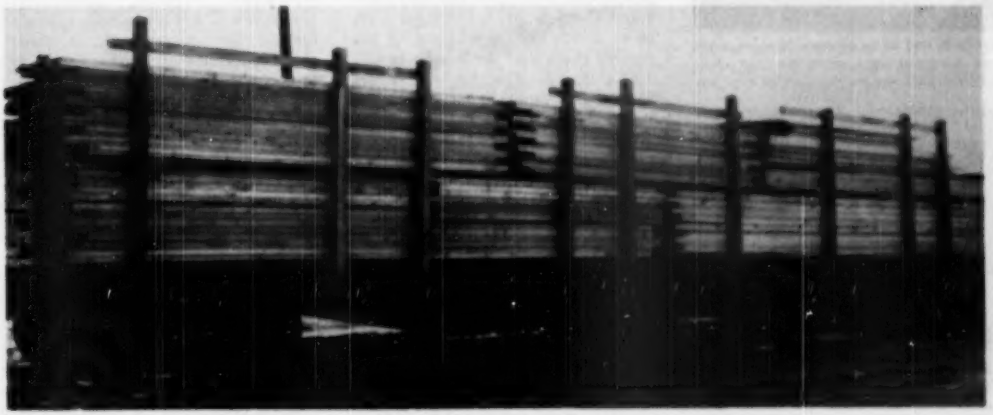
How a lift truck can quickly unload plywood and wall material from a box car opening was demonstrated to dealers in the third part of the program. The bundled plywood, held firmly together with steel straps, was set in the boxcar opening on bucks (4 x 4's) to provide a space for forks of the truck to be inserted.

Flatcar loading and unloading was demonstrated next, again with one man driving a lift truck, accomplishing many times more work in a few minutes time than several men could do in a full day. Philip Creden, advertising manager of Hines, in charge of the program, said it is not difficult with his firm's power equipment to unload a flatcar in approximately twelve minutes.

Interest in the last part of the program in the Hines mill centered around a power saw equipped with a conveyer table and safety power feed used for self-feeding of material through the saw. In the demonstration, the saw ripped 2 x 12's, 16 feet long, dadoed the same material, and with shaper cutters attached, the saw did shaping.

Materials handling equipment demonstrated at the Hines yard included Ross carrier and lift trucks, Ross Carrier Co.; Hyster lift trucks, Hyster Co.; Gerrard steel strapping, Gerrard Steel Strapping Co.; Acme steel strapping, Acme Steel Co.; Signode steel strapping, Signode Steel Strapping Co., DeWalt Model GEV saw, DeWalt, Inc.

PLYWOOD sheets are strapped with two No. 8 gauge round steel strap at Hines yard

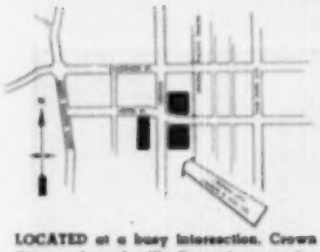


STRAPPED flat carload of lumber units can be made up of various length boards

Mechanized Operations

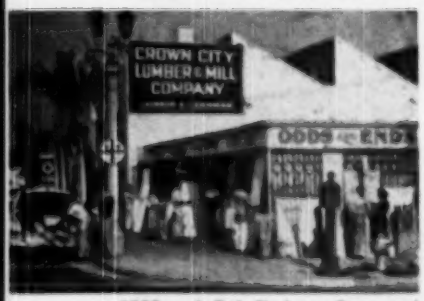
Power equipment has made possible the steady growth and expanding business of this mill and yard where "the customer has been king" — since 1904

LATHROP K. LEISHMAN, president, (right) talking to CLINTON CHURCHILL CLARK, first customer of Crown City Lumber & Mill Co. and a steady customer since 1904



LOCATED at a busy intersection, Crown City yards and mill offer unique service

OFFICE and sales counter. Note counters are mounted on casters so that their arrangement can be changed at any time



ODDS and End Shed on Green and Vernon where customers serve themselves

FAITHFUL adherence to a slogan and a policy over a period of two generations has steadily built the business of the Crown City Lumber & Mill Co., Pasadena, Calif. until today it covers five acres, sprawling out in all directions from the original site established in 1904 by the father of the present owner. The slogan, "The Customer Is King," formulated into a policy and instilled into the minds of all employees, is responsible for this growth.

William L. Leishman founded the business 46 years ago in a small plant on ground where one of the present buildings now stands. Since that time the organization has increased many times and the physical facilities have been enlarged accordingly. There came a time when space adjacent to the first building was not available and space on the other side of Green Street had to be used; this took care of the situation for awhile but soon it was necessary to have more room and the firm had to cross Vernon ave. As a result the plant is in three sections as shown on the diagram. The building which houses the heavy equipment such as the resaw and the gang rip saw and the moulding shed, is a full block and a half from the siding where cars are unloaded. The storage plant across Vernon is about the same distance.

Under these conditions it was natural for the company to acquire mechanized equipment for handling lumber and they now use two Gerlinger Carriers and a Gerlinger Lift, all of which dart in and out of the various sheds and yards with bewildering speed. The big Gerlinger, 30,000 pound capacity, handles lumber in the yards while the smaller carrier with a 14,000 pound capacity can get into the mills and the sheds. All timbers, rough lumber and some dimension lumber are stored in the open adjacent to the siding, some to be air-dried. They are stacked in 20 foot piles by the Gerlinger lift. The lift is, of course, also used for unloading gondola cars and for stacking wallboard and other flat items in the dry shed, as well as for other loading and unloading operations.

The small Gerlinger is the real work horse because it is used to deliver material to the mills and to pick up loads of outgoing lumber to take it to the shipping room. Whenever orders are made up in any of the storage points the material is placed on carrier blocks with one of the top boards marked to indicate whether the material is to go to a mill for processing or to the shipping room for loading on a truck. The small carrier picks up these loads as fast as the operator can get around to them.

The company operates three roller bed trucks and two pick-up trucks for delivery of lighter items. The pick-up trucks are equipped with a metal frame which permits long lengths to be loaded with ends extending over the cab of the truck. All loads are strapped with steel bands which facilitate unloading from the roller bed trucks and which also protect the material against theft to some extent, while it is on the customer's lot awaiting use. The strapping is done with a Signode Steel Strapping Coil Box.

Although the company carries the most complete stocks of lumber of all kinds to be found in the area and does a substantial volume on staple items with contractors, industrials and the general public, perhaps the most important end of the business is the custom millwork department where a combination of expert "know-how" plus tens of thousands of dollars worth of fine machinery enable them to turn out millwork and cabinet work of unusual quality and variety. Custom pews, stairways, doors, wall panels, mouldings, cabinets, ornamental woodwork of any character—is made quickly and economically in these mills. The mills are devoted entirely to custom work and no stock sizes are run except when they are part of a custom order.

Every effort is made in the mill to avoid unnecessary handling of material. Each order is hauled from machine to machine on hand trucks; even many of the machines are on wheels so that the work can be brought to the machines or the machines to the work, whichever is best for a particular order. The equipment in the main millwork plant is by far the most extensive and complete in the area and includes the following saws and other machines: De Walt Cut-Off saw; 2 Oliver Table Saws; Crescent Table Saw; 36 inch Band

Speed Mill and Yard Output

GERLINGER Carrier a real workhorse for the yards and mill

Saw (name obliterated); Boice-Crane Chop Saw; Beach Jig Saw; Mattison Straight Line Ripsaw; Crescent Jointer; Porter Jointer; Famous Jointer; Greenlee Planer; Buss Planer; Greenlee Mortiser; 2 Greenlee Tenoners; Smith Sticker; Crescent Sander; Berlin Drum Sander; Workage Coping Machine.

In the mill across the street where the heavy machinery is used there is a McDonough Resaw, Greenlee Planer, a gang ripsaw made by California Engineering & Machinery Works, Yates sticker and two Berlin stickers. Stored near these last three machines are thousands of moulding knives.

With the three Gerlingers and all of the above machinery plus five trucks, maintenance is an important item and the policy of the company is to immediately repair any machine the moment it shows any signs of wear or being out of order. One of the men is a good mechanic and he does the work if possible; if not, outside help is called. Safety is also given much attention. A meeting of all superintendents and their assistants is held each month to discuss ways and means of preventing accidents. Signs posted throughout the mill read "Please Do Not Talk To Men While Working—It Might Mean Losing A Finger."

Lathrop K. Leishman, president of the company, is proud of the business philosophy established by his father and constantly strives not only to furnish materials of better quality but to find better methods of displaying and selling them. An example of this better service is found in the unique Odds and Ends Shed (see opposite page).

Located on the corner of Green street and Vernon avenue, this self-service sidewalk shop offers items of all kinds likely to be wanted by the handy homeowner, ranging from fence pickets, trellis material to pieces of plywood 4 feet by 8 feet and including doors, and screens. Each item has its price plainly marked on it. When a customer has made his selection he gets a sales slip from an attendant and takes it into the office next door to pay the bill and then puts his merchandise into his car. A parking lot behind the shed is a convenience to those who can get into it but on Saturday mornings is not nearly adequate for the crowds who patronize this service and whose cars line the street for a block in both directions.

Another somewhat similar service is available to both contractors and consumers in the storage yard across Vernon avenue where stocks of Redwood and Douglas Fir boards are carried plus a few other staple items. One corner of this yard is devoted to miscellaneous piles of lumber each with a price marked on it for the whole load.

GERLINGER Lift aids in loading and unloading all types of materials

More Power For You

By R. E. Sabersen

"Smooth Sawyer Tom" was a joy to behold, but modern tools help bridge gap between his work and that of "Crooked Kerf Charlie"

IN the little town where I grew up, Tom Rhodes could saw a board in two quicker and more accurately than any other carpenter in the community. His saws were his pride and joy. He gave them even more attention than his razor. They not only were kept sharp and shiny, but they were protected meticulously from all harm. The tool chest where they were kept was a joy to behold because Tom devised a method by which the teeth of the saws never touched anything other than the soft protective slots which held them in proper place.

Tom was a great man with the saw and it was a pleasure to watch him go about his job of cutting a board in two. He would first size it up with a practiced eye. Then he would pick up his square, pull a carpenter pencil out from under the brim of his cap, mark the board accurately in the proper place and then fall to with his beloved saw.

Singing Through The Knots

We used to stand and watch Tom as the saw sang through the wood—wet, dry, hard, soft, and even the knots, which were the bane of the existence of the less experienced carpenters.

Tom could follow a sawing line as accurately as any precision machine that was ever put into a factory. When he started across the board he never stopped until the saw had cut its way through the entire piece. At regular intervals, he blew the sawdust in all directions with a blast of bellows-like proportions. His lung power enabled him to keep the line free of all sawdust accumulation. When he had finished with any particular saw cut, he picked up the ends of the pieces, ran his thumb along the edges, laid them down with a gleam of satisfaction in his eye.

In sharp contrast to Tom, the efficient sawyer, was Charlie Boyles who couldn't saw a piece of hot butter in two and do much of a job of it. Charlie's saws were rusty. They were seldom sharp. But even if he had been given the privilege of using one of Tom's best tools, he could not have followed a line to save his neck.

Between Tom, who stood at the top of the list in efficiency, and Charlie, who never let anybody occupy the lowest rung of the ladder, there were many carpenters of varying degrees of efficiency in the community. Each had his rating—good, bad or indifferent.

"If you can get Tom Rhodes to build your house, you will get a good house," was the invariable verdict of home prospects. But, of course, the problem was to get Tom to do it because he was always booked up so far ahead. On the other hand, Charlie Boyles was always looking for a job. And, naturally, the difference between the two was the direct result, not only of the way they kept their saws but how they used them.

Power Tools Bridge Gap

Down through the years it is interesting to observe that ways and means have been developed by inventive minds to bridge the gap between Tom and Charlie. The end result has been that Charlie is now able to closely approach Tom when it comes to doing a good job of sawing and, of course, it was all brought about by the development of power tools. Charlie's inability to follow a straight line has now been overcome by the gauges which are now employed in power equipment to make it impossible for him to saw a crooked line. The board is slapped onto the machine and pushed into proper place. The whirling saw bites in at the precise spot where the cut is to be made and in the twinkling of an eye the job is done.

Charlie is entirely capable of picking up a board, putting it in place, pushing the button or pulling a lever and taking the boards off the machine.

Tom, on the other hand, is entirely pleased with the fact that his employees are able to take over a part of the job that he alone could do accurately. It enables him to build more houses and to do a better job than was the case when the entire burden of accuracy rested on his shoulders alone.

It perhaps is needless to call attention to the fact that accuracy was likewise more or less difficult on the part of anyone who was called upon to saw a board in two atop a sawhorse perched somewhat precariously upon the irregularities of the ground, which invariably prevailed on the building site. Despite the fact that accuracy was absolutely essential in cutting the several thousand parts which made up the construction of a home, it should always be remembered that this accuracy was achieved under exceedingly difficult circumstances.

Neat Balancing Act

In no other industry were workmen required to handle long boards in windy weather, and to attempt to hold them properly in place across a couple of sawhorses on uneven ground.

Notwithstanding such difficulties, good construction was available through such individuals as Tom Rhodes, who not only knew his saws but how to use them.

As the years went by, it became necessary to speed up production on the building site, or at least to improve the workmanship of the majority, who were not as efficient as Tom. That, of course, was a difficult problem since it meant that each and every one of the other workmen would have to do exactly what Tom had done in order to become an expert with the saw. That, naturally, was impossible because the majority simply didn't have it in them.

The coming of power tools undoubtedly is the greatest thing that has happened to the light construction industry, and this is as true of the building of a home as in the erection of a farm or the simplest sort of an agricultural building.

More Tools, More Homes

Power equipment on the building site, or anywhere else, does not necessarily mean that fewer men are employed in the light construction industry. As a matter of fact, exactly the reverse is true for the reason that when you make it easier to build a better building and do it quicker, it quite obviously means that more and more people can become the happy owners of such structures.

The scene on the building site today is something entirely different than when Tom Rhodes spent half the summer building a house. Now they go up like magic, and the best part of it is that the cuts are made with precision accuracy by practically anyone who happens to be employed on the job.

Tom Rhodes, or his counterpart, lays out the work. The rest is comparatively easy, since each and every part fits into place accurately because the cut has been made with precision machinery.

Nothing is more interesting than to ponder the widespread changes that have taken place in construction since

(*Continued on page 150*)

These Manufacturers Produce Powered Tools and Equipment for Builders

Allis Chalmers Mfg. Co., 1126 S. 70th St., Milwaukee 1, Wis. (Earth-moving equipment)
American Floor Surfacing Machine Co., 515 S. Clair St., Toledo, Ohio (Floor surfacing machines; Portable electric saw; Portable electric sander)
American Saw Mill Machinery Co., Hackettstown, N.J. (Power saws and sawmills)
J. W. Appley and Son, Inc., P.O. Box 849, St. Petersburg 2, Fla. (Concrete block machinery)
Arrow Contractors Equipment Co. 2020 Walnut St., Chicago 12, Ill. (Small scooter loader)
Atlas Press Co., Kalamazoo, Mich. (Power saws)
Automatic Transportation Co., 101 W. 87th St., Chicago 20, Ill. (Lift trucks)
Azer Products, 696 S. Santa Fe Ave., Los Angeles, Calif. (Pneumatic nailing machine)

Barnes Mfg. Co., 651 N. Main St., Mansfield, Ohio. (Pumps)
Beaver Pipe Tools, Inc., Warren, Ohio. (Portable pipe and bolt threading machine)
Bell Aircraft Corp., Prime Mover Div., P.O. Box 1, Buffalo 5, N.Y. (Power operated wheelbarrow)
Besser Mfg. Co., Alpena, Mich. (Block and brick making equipment)
Black and Decker Mfg. Co., Towson, Md. (Electric tools)
Blaw-Knox Co., Farmers Bank Bldg., Pittsburgh, Pa. (Transit mixers)
Boice-Crane Co., 930 W. Central Ave., Toledo 6, Ohio. (Woodworking equipment)
Bradford Machine Tool Co., 659 Evans St., Cincinnati, Ohio. (Power hand saws)
Briggs and Stratton Corp., 2711 N. 13th St., Milwaukee, Wis. (Portable engines)
Bucyrus-Erie Co., South Milwaukee, Wis. (Hydraulic cranes)
Buss Machine Works, 240 Eighth St., Holland, Mich. (Planers)

Caterpillar Tractor Co., 600 W. Washington St., East Peoria, Ill. (Earth-moving equipment)
Chain Belt Co., 1600 W. Bruce St., Milwaukee 4, Wis. (Concrete mixers)
Champion Mfg. Co., 2028 Washington, St. Louis, Mo. (Masonry saws)
C. H. & E. Manufacturing Co., 3849 N. Palmer St., Milwaukee, Wis. (Power saws)
Chevrolet Div., General Motors Corp., General Motors Bldg., Detroit 2, Mich. (Trucks)
Chicago Pneumatic Tool Co., 6 E. 44th St., New York, N.Y. (Portable electric saw)
Clark Equipment Co., Industrial Truck Div., Battle Creek, Mich. (Lift trucks)
Clarke Sanding Machine Co., Muskegon, Mich. (Sanding machines)
Clipper Mfg. Co., 2808 Warwick, Kansas City 8, Mo. (Masonry saws)
Comet Mfg. Co., 9253 Nicollet Ave., Minneapolis, Minn. (Power hand truck)
The Cleveland Trencher Co., 20100 St. Clair Ave., Cleveland 17, Ohio. (Trenching equipment)
Consolidated Machinery & Supply Co., 3031 Santa Fe Ave., Los Angeles, Calif. (Radial saws)
Construction Machinery Co., 420 Vinton St., Waterloo, Iowa. (Concrete mixers, hoists)
Cummins Portable Tool Div., C. B. N. Corp., 4740 Ravenswood, Chicago, Ill. (Portable electric saws)

Delco Appliance Div., Lyell & Whitney Sts., Rochester, N.Y. (Pneumatic tools)
Detroit Surfacing Machine Co., 7433 W. Davidson St., Detroit, Mich. (Portable electric sanders)
De Vilbiss Co., 300 Phillips, Toledo, Ohio. (Paint spraying equipment)
DeWalt Products Co., 154 Fountain St., Lancaster, Pa. (Power saws)
Dodge Div., Chrysler Corp., 7930 Joseph Campau Ave., Detroit, Mich. (Trucks & power wagon)
W. E. Dunn Co., 415 W. 23rd St., Holland, Mich. (Concrete block machines)

Ennis Supply Co., 334 First St., No. Minneapolis, Minn. (Power saws)
Essick Mfg. Co., 1950 S. Santa Fe Ave., Los Angeles, Calif. (Concrete mixers, plaster mixers, hoists, road rollers)
Eveready Briksaw Co., 1509 So. Michigan, Chicago, Ill. (Masonry saws)

Federal Motor Truck Co., 5780 Federal St., Detroit, Mich. (Trucks)
Fleming Mfg. Co., 4985 Fyler Ave., St. Louis, Mo. (Concrete block machines, concrete mixer)
The Foote Co., Nunda, N.Y. (Concrete mixers)
Foley Mfg. Co. 3300 N.E. Fifth St., Minneapolis 18, Minn. (Automatic saw filers)

Ford Cement Block Mach. Co., Cedar Falls, Iowa (Cement block machines)
Ford Motor Co., Dearborn, Mich. (Trucks)

General Floorcraft, Inc., 333 Sixth Ave., New York, N.Y. (Floor surfacing machines)
Gettman Bros., So. Haven, Mich. (Power barrow)
G.M.C. Truck & Coach Div., General Motors Corp., 660 South Boulevard, Pontiac 11, Mich. (Trucks)
Gilson Bros. Mfg. Co., Fredonia, Wis. (Concrete mixers, plaster mixers)
The Gorman-Rupp Company, 305 Bowman, Mansfield, Ohio. (Pumps)
F. C. George Machine Co., 100 S. Westmoreland Dr., Orlando, Fla. (Cement block machines)
Gesner Equipment Corp., Hamden, Conn. (Radial saws)

Henniker Machine Co., Henniker, N.H. (Woodworking machines)
Heston & Anderson Div., St. Paul Eng. & Mfg. Co., 601 Kirkwood Ave., Fairfield, Iowa (Power saws)
Hilger Co., St. Cloud, Minn. (Floor machines)
Holt Mfg. Co., 20th & Grove, Oakland, Calif. (Floor sanders and polishers)
Homelite Corp., 67 Riverdale Ave., Port Chester, N.Y. (Portable generators)
Frank G. Hough Co., Libertyville, Ill. (Bulldozers)
The Hyster Co., 2902 N.E. Clackamas, Portland, Ore. (Lumber carriers)
Hutchinson Mfg. Co., Norristown, Pa. (Woodworking machines)

Independent Pneumatic Tool Co., State and Claim Sts., Aurora, Ill. (Portable electric saws, drills, hammers, nibblers, impact wrenches, grinders)
Ingersoll-Rand Co., 11 Broadway, New York 4, N.Y. (Compressors, Power drills)
International Harvester Co., 180 N. Michigan Ave., Chicago, Ill. (Trucks)

Jackson & Church Co., 321 W. Hamilton, Saginaw, Mich. (Brick and block making machines)
Jaeger Machine Co., 550 Spring St., Columbus 12, Ohio. (Concrete mixers, tilters, pumps, hoists)
Jitterbug Sander Co., Inc., Menominee, Mich. (Portable electric sanders)

Kott Tool Co., 38 Third, Cincinnati, Ohio (Pneumatic tampers)
King Mfg. Co., 3146 W. Chicago Ave., Chicago 22, Ill. (Portable hoists)
Knickerbocker Mfg. Co., 603 Liberty, Jackson, Mich. (Concrete mixers, tilters, & transit mixers)
Koehring Co., 3026 W. Concordia Ave., Milwaukee 10, Wis. (Concrete mixers, power wheelbarrows)
Kohler Co., Kohler, Wis. (Portable electric plants)
Kwik-Mix Co., Port Washington, Wis. (Concrete mixers)

Lansing Co., 603 North Cedar St., Lansing, Mich. (Mixers)
LaPlant-Choate Co., 2920 First Ave., NE Cedar Rapids, Iowa. (Earth-moving equipment)
Lincoln-Schlueter Floor Mach. Co., 1250 W. Van Buren St., Chicago 7, Ill. (Floor sanders and floor polishers)
Lincoln Tractor Co., Arcadia, Calif. (Tractors)
Lith-I-Bar Co., Holland, Mich. (Concrete block machines)

Mack International Motor Corp., 350 Fifth Ave., New York, N.Y. (Trucks)
Mall Tool Co., 7740 S. South Chicago Ave., Chicago 19, Ill. (Electric vibrator, portable power saws, electric planes)
Marlow Pumps, Ridgewood, N.J. (Pumps)
Martin Fireproofing Corp., 2100 Military Rd., Buffalo 17, N.Y. (Masonry saw)
Master Woodworker Mfg. Co., 407 E. Fort St., Detroit 26, Mich. (Power saws)
Mason Construction Co., 131 No. Ludlow, Dayton, Ohio (Ready mix trucks)
Mine Safety Appliances Co., 201 N. Braddock St., Pittsburgh, Pa. (Power actuated tools for driving studs into steel and concrete)
Mixermobile Manufacturers, 6853 N. E. Halsey, Portland 16, Ore. (Concrete mixers)
Muller Machinery Co., Metuchen, N.J. (Concrete mixers)
Sam Mulkey Co., 1621 Locust, Kansas City, Mo. (Conveyors)
Multiplex Concrete Machine Co., Elmore, Ohio (Concrete block machines)
Milwaukee Electric Tool Corp., 5316 W. State, Milwaukee, Wis. (Portable power tools)
Nelson Stud Welding Div., Morton Gregory Corp., Lorain, Ohio (Stud welding equipment)

D. W. Onan and Sons, Inc., 43 Royalston Ave., Minneapolis 5, Minn. (Portable power plants)

The Oliver Corp., Cletrac Div., 19300 Euclid Ave., Cleveland, Ohio. (Earth moving equipment)
The Osgood Co., Marion, Ohio (Earth moving equipment)
The Oster Mfg. Co., 2045 E. 61st St., Cleveland 3, Ohio. (Pipe cutting and threading machine)

Packard Mfg. Co., Noble & Market Sts., Indianapolis, Ind. (Sawguide, portable power saw)
Parks Woodworking Machinery Co., 1524 Knowlton St., Cincinnati, Ohio (Planers)
Pacan Co., Dowagiac, Mich. (Power saws)
Porter Cable Machine Co., 1714 N. Salina St., Syracuse, N.Y. (Portable power tools)
Portable Electric Tools, Inc., 355 W. 79th St., Chicago, Ill. (Electric drills)
Powder-Power Tool Corp., 1618 N. Vancouver Ave., Portland, Ore. (Impact tools)
Power King Tool Corp., Warsaw, Ind. (Power tools)
The Prime Mover Co., Muscatine, Iowa. (Power Barrow)

Ransome Machinery Corp., Dunellen, N.J. (Cement mixers)
R. S. Reed Corp., Three Rivers, Mich. (Concrete blocks and brick making machines)
Reid-Way, Inc., 2925 First Ave., N.E. Cedar Rapids, Iowa. (Floor sander)
Power Tool Div., Rockwell Mfg. Co., 634 E. Vienna Ave., Milwaukee, Wis. (Power saws)
Ross Carrier Co., 331 Miller Harbor, Benton Harbor, Mich. (Lift trucks)
Reo Motors, Inc., 1331 S. Washington St., Lansing, Mich. (Trucks)

Sasgen Derrick Co., 3101 W. Grand Ave., Chicago 22, Ill. (Derricks)
Shopmaster, Inc., 1214 Third St., S., Minneapolis, Minn. (Power shop tools)
S J B Corporation, 304 E. Ellen St., Fenton, Mich. (Concrete block machines)
Skilsaw, Inc., 5033 Elston Ave., Chicago, Ill. (Portable electric saws, floor sanders, power saws)
T. L. Smith Co., 2835 N. 32nd St., Milwaukee, Wis. (Concrete mixers)
The Speed Corp., 2025 N.E. Sandy, Portland, Ore. (Saw filers)
Stearns Mfg. Co., Inc. 602 E. Beecher, Adrian, Mich. (Concrete block making machines)
Stanley Works, New Britain, Conn. (Portable power tools)
Stomco Corp., 3130 W. 121st St., Cleveland, Ohio. (Power actuated tools for driving studs into steel and concrete)
Stone Machinery Co., Manlius, N.Y. (Stone saws)
Syntron Company, Homer City, Pa. (Power tools)
Toolkraft Corporation, 447-451 Meadow St., Waterbury 91, Conn. (Woodworking machines)
B. K. Tyro Co., Forest Lake, Minn. (Concrete block machines)
Treyco Products, 304 Hertford Ave., Buffalo 17, N.Y. (Saw sharpening machines)

Uniflow Mfg. Co., 1025 E. Lake Rd., Erie, Pa. (Pumps)

Victor Engineering Corp., Wilson Ave. & Green Lane, Bristol, Pa. (Masonry saw)

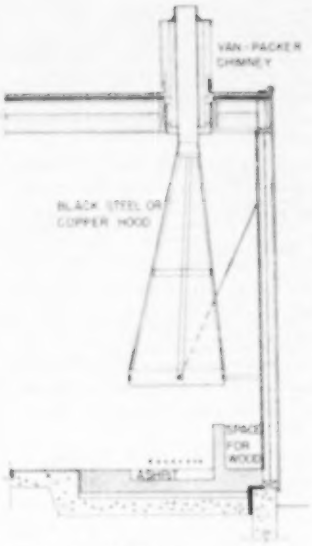
J. D. Wallace & Co., 134 S. California Ave., Chicago 12, Ill. (Power saws)
Wallace Supplies Mfg. Co., 1300 Diversey Parkway, Chicago, Ill. (Pipe bending machines)
Walker-Turner Co., Inc., 639 South Ave., Plainfield, N.J. (Power saws)
Fred W. Wappat, Inc., Mayville, N. Y. (Portable power saws)
Wayer Impactor, Inc. 12 N. Third St., Columbus, Ohio (Machine for tamping asphalt surface)
The White Motor Co., 842 E. 79th St., Cleveland, Ohio. (Trucks)
Whiteman Mfg. Co., 3249 Casitas Ave., Los Angeles 26, Calif. (Power concrete finishing machine and power concrete carts)
Willys-Overland Motors, Inc., Wolcott Blvd., Toledo, Ohio (Jeeps and trucks)
Wodack Electric Tool Corp., 4627 W. Huron St., Chicago 24, Ill. (Electric hammer)
Woodworkers Tool Works, 222 S. Jefferson St., Chicago, Ill. (Shapers, shaper spindles, cutters)
Worthington Pump and Machinery Corp., 361 Canal St., Holyoke, Mass. (Compressors, pumps, and air tools)

XL Products Co., 4617 Airport Way, Seattle, Wash. (Woodworking machines)

Yale & Towne Mfg. Co., Philadelphia, Pa. (Pumps, hoists, industrial trucks, scales)

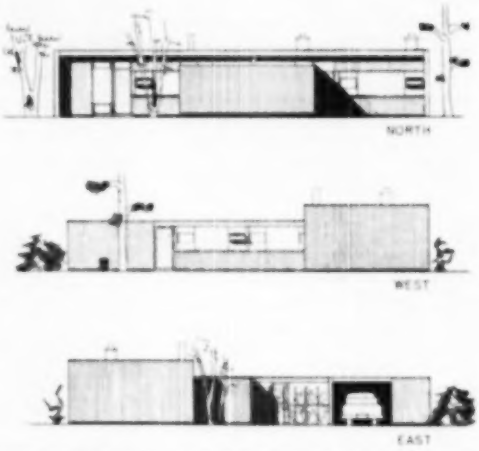
Zagelmeyer Cast Stone Block Machinery Co., Bay City Mich. (Concrete block machines)

AMERICAN BUILDER PRIZE HOME COMPETITION

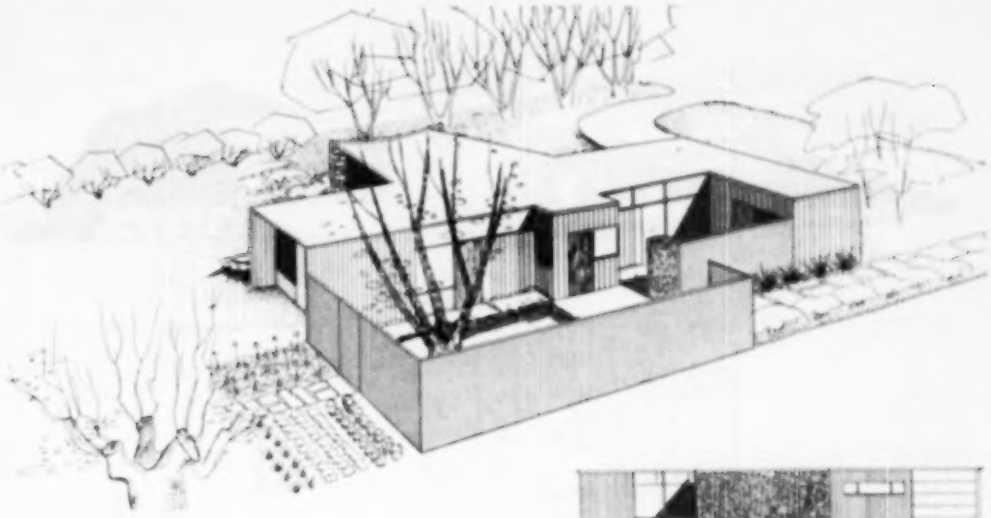


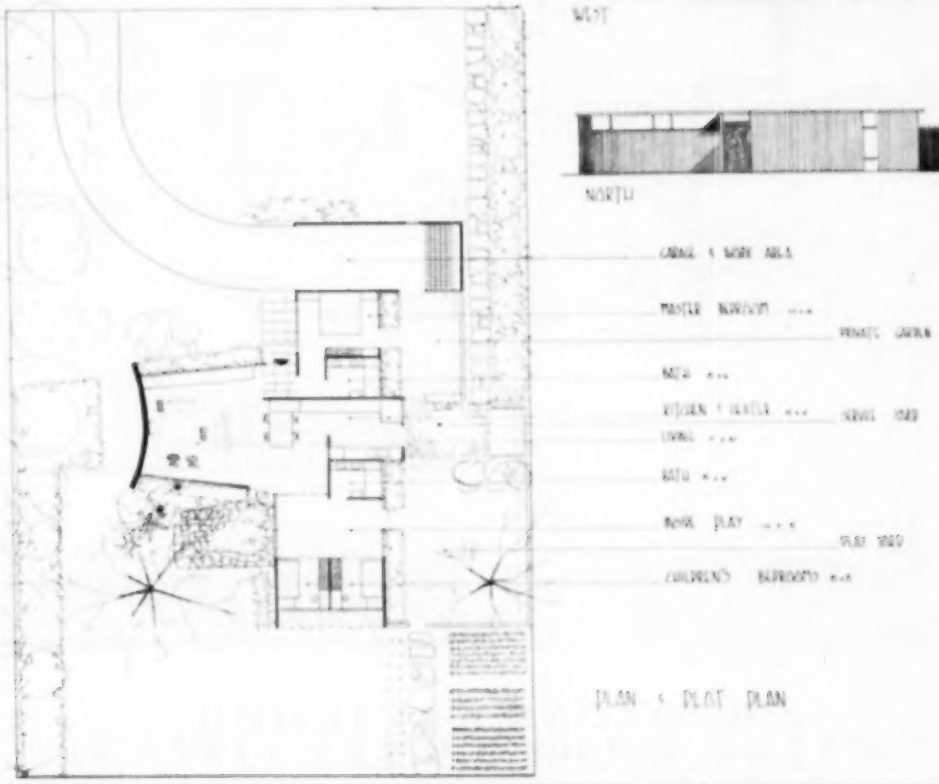
SECTION THRU FIREPLACE

The design submitted herewith and the six that follow were awarded honorable mention in a competition for women architectural students sponsored by the American Builder and the Women's Division of the National Association of Home Builders. The contest problem was to design a single-family dwelling for a family in the middle income bracket

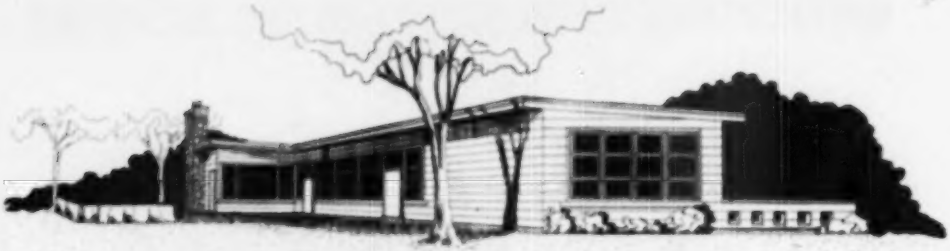


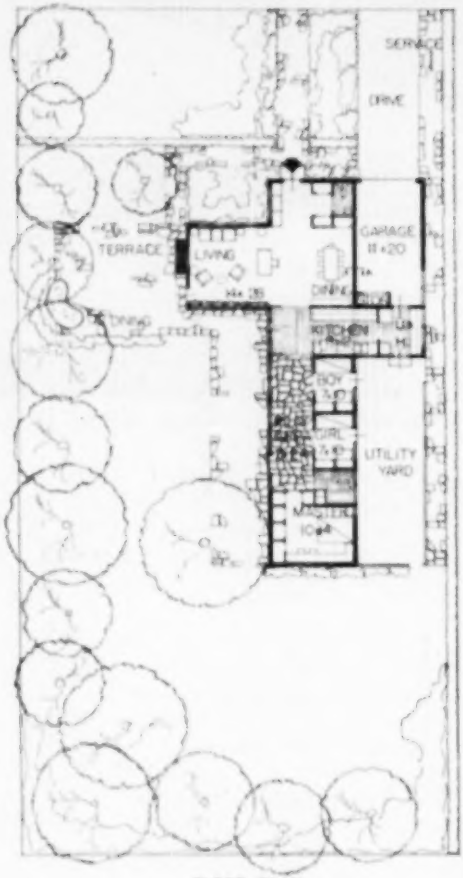
DORA L. WIEBENSON, HARVARD GRADUATE SCHOOL OF DESIGN, CAMBRIDGE, MASS.—Good points: Compactness of plan and simplicity of massing; orderly arrangement of service units; departmental bathroom strategically located with relation to living and sleeping quarters. Interesting solar treatment of south exposure; openness to prevailing breezes. This home was criticized for the position of the front entrance which causes guests to pass workroom and kitchen; for the difficulty to convert play area into bedrooms when children grow up; for lack of adequate cross ventilation in bedrooms; for allotting too much of the living room area to the fireplace; and for the front door that opens into living room





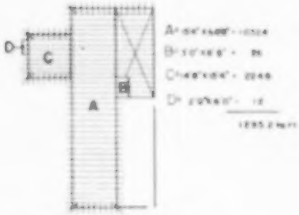
MRS. JEANNE SCHLESINGER. UNIVERSITY OF ILLINOIS. URBANA. ILL.—Good points: Compact plan; service portion well related to dining area and family entrance; fenced in outdoor areas well placed in relation to adjoining rooms; extensive use of folding doors. Criticized for the wide separation between master bedroom and children's bedroom; because kitchen is too open towards living room; because of the costliness of the curved stone wall of living room; for insufficient space for utilities and storage areas; for failure to include a fireplace; because children's bedrooms were too cramped to accommodate inside playroom.



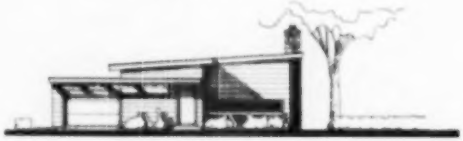


FLOOR PLAN

SECTION-A



CUBAGE & ROOF FRAMING

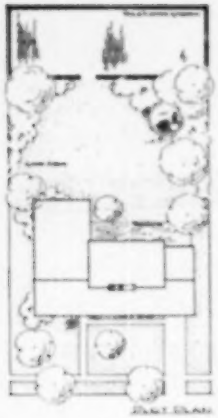


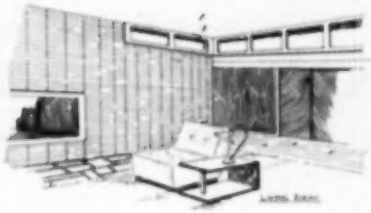
NORTH ELEVATION

WEST ELEVATION

AMERICAN BUILDER PRIZE HOME COMPETITION

MARGARET E. HUDAK, CARNEGIE INSTITUTE OF TECHNOLOGY, PITTSBURGH, PA.—Good points: Openness to prevailing breezes; elements of service well related; convenience of outdoor play or utility yard to children's bedrooms. Criticized for inadequate storage and closet space; for somewhat forbidding appearance of street elevation; for lack of window in powder room; for use of living room as passageway; for reducing the size of boy's and girl's rooms to provide for adequate play area; for long corridor-like structure of bedrooms; because the main entrance to the house was rather distant from all other elements



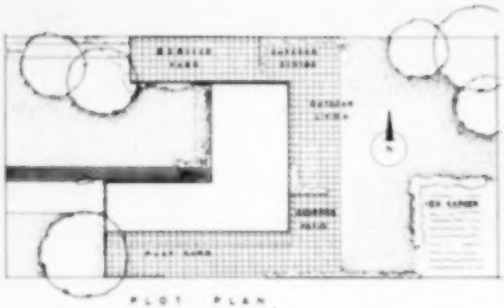


AMERICAN BUILDER PRIZE HOME COMPETITION

E. ELIZABETH TRAINER, UNIVERSITY OF ILLINOIS, URBANA, ILL.—Good points: Compactness of plan for house proper; consolidation of living areas into sizable open space; unique wood screen separating sleeping and dressing portion of master bedroom; splendid fenestration of south living room wall. Criticized for having only one bathroom in a potential four bedroom house; for long narrow hall in sleeping quarters; for lack of play area for small children; for the use of sliding doors on exposed living room wall; for lack of a service yard near kitchen-laundry; for having principal bedroom exposures toward side lot line

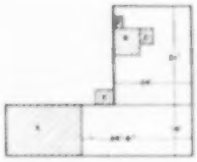
PERSPECTIVE FROM SOUTH EAST

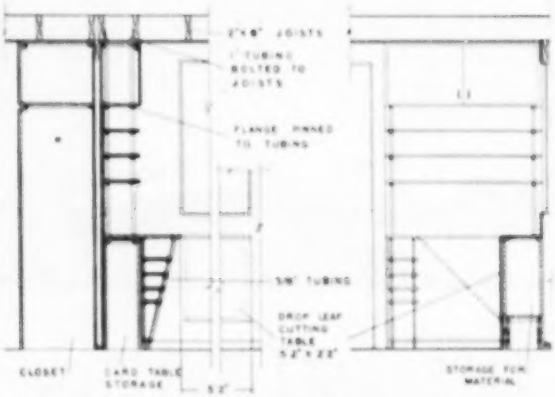
PLAN



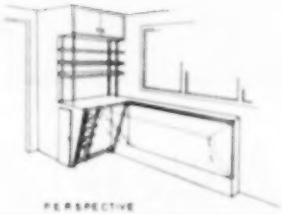
PLOT PLAN

WEST ELEVATION



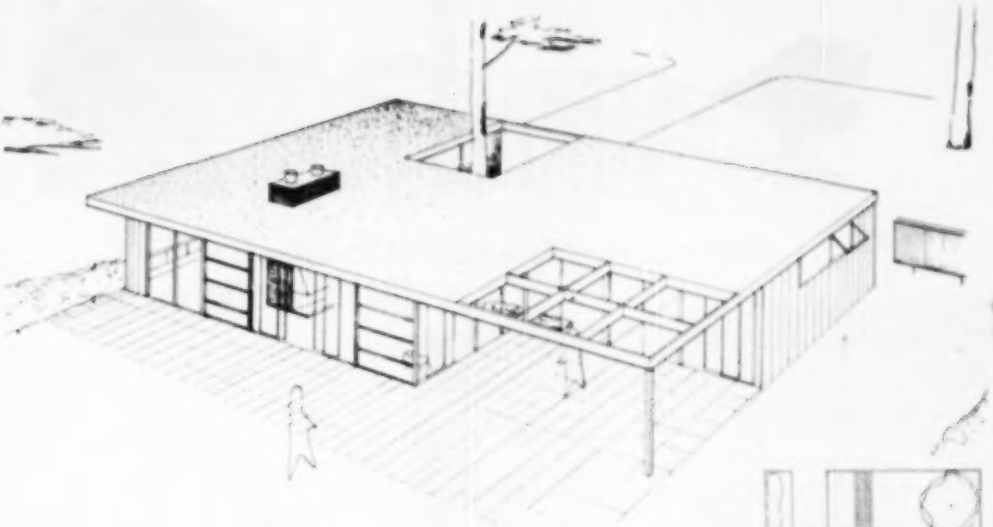


DETAIL OF SEWING CENTER



PERSPECTIVE

JOY MILAM, TULANE UNIVERSITY, NEW ORLEANS, LA.—Good points: Simple construction methods employed; use of bedroom hall as play-space; compact plan with good circulation; service units well placed; sheltering of front entrance and pleasing external appearance. Criticized for the extensive use of glass sliding doors which indicate house to be distinctly regional in planning; for inadequate utility space; for cramped kitchen area with no space available for informal dining; for the cramped dining room which allows no provision for guests; for the questionable type and size of fireplace; and for the minimum sleeping facilities provided for the children



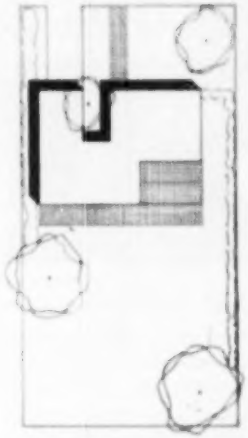
NORTH

WEST

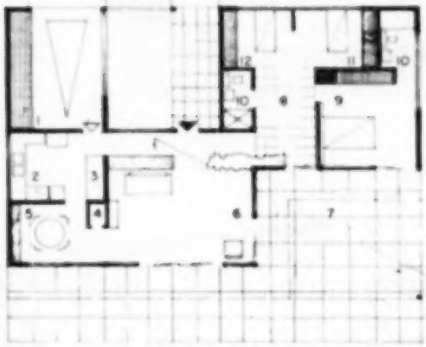
LOCALE - FLORIDA

A - 23 x 28 - 621
B - 20 x 33 - 660
TOTAL - 1281

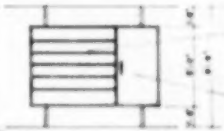
SHADED AREA NOT COUNTED

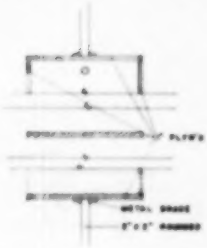


FLOOR PLAN

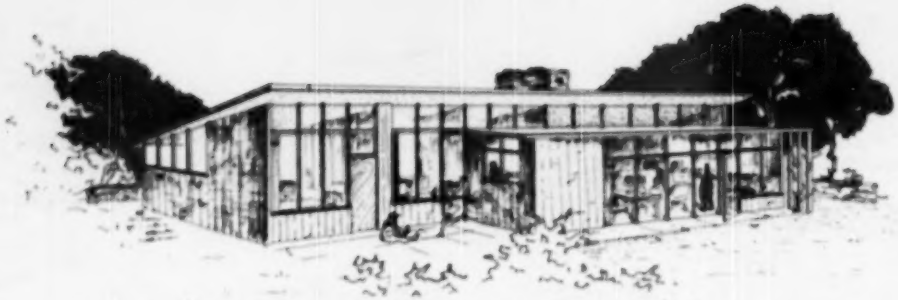


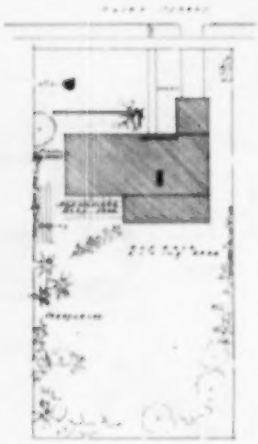
1	GARAGE	
2	KITCHEN	10 X 10
3	LAUNDRY	4 X 6
4	HTR	4 X 5
5	DINING	9 X 11
6	LIVING	15 X 20
7	TERRACE	
8	PLAY AREA	8 X 14
9	MBR	12 X 14
10	BATH	5 X 8
11	BOY	8 X 9
12	GIRL	8 X 9

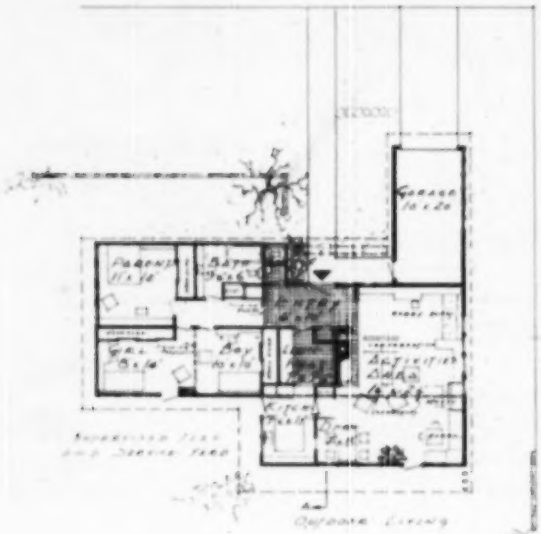


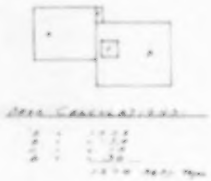


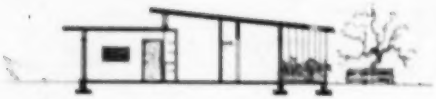
ANN NICHOLAS. CARNEGIE INSTITUTE OF TECHNOLOGY. PITTSBURGH. PA. Good points: Simplicity of plan and mass; service portion well related to dining room and family entrance; unusual combination of kitchen, laundry and sewing units all confined to one room. Criticized for lack of cross ventilation in all rooms except kitchen; for separation of garage from kitchen units; for the rather flat and uninteresting appearance of street front; for the inadequacy of both the children's bedrooms and the dining room; for the complete separation of play and service yard, making supervision of children at play impossible from the living or work area of house











NINA PENCE, COLLEGE OF ARCHITECTURE, UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH.—Good points: Splendid supervision of outside play area from kitchen; use of folding partition in converting children's bedrooms to inside play area; living room separated into group activities area; compact plan. Criticized for careless handling of leanto portion of living room; for lack of cross ventilation in bedrooms; for having to pass through laundry to enter kitchen; for separation of service units such as kitchen and garage; for unimposing street elevation; for a lack of bulk storage and closets; and for the minimum area allotted to both the utilities and the kitchen

here's how

we make sure Rō-Way doors will serve BETTER...LONGER!

Each door is built completely in the Ro-Way plant. Then erected by one of Ro-Way's national network of selected distributors.

BETTER BUILT

Only high quality lumber is used. Personally selected by our own buyer at west coast mills.

Panels are made of 3-ply, exterior grade Douglas Fir plywood for maximum resistance to moisture.

Multiple mortisers are used to assure accuracy, uniformity and good fit.

Tenons are cut on both ends in one operation for efficient construction.

BETTER FINISHED

Muntins, rails and stiles are *accurately* squared up.

Sections are drum-sanded to a fine preliminary finish.

Ro-Way's own workmen then do the final finishing with hand sanders.

All sections are rabbeted carefully to assure weather-tight joints.

BETTER ALL AROUND

All mortise and tenon joints are glued and then *steel* doweled for strength.

Ro-Way springs are made in our own plant, and power-metered to the weight of the door on which they're used.

Special machines make Ro-Way track rollers with a double-thick tread that wears twice as long.

After all Ro-Way hardware has been fabricated, it is Parkerized and painted for extra protection against rust and streaks that spoil the looks of a door.

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Ro-Way Overhead Type Doors are available for all Industrial, Commercial and Residential Installations.

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"... use my Fred W. Wappat Saw to cut lumber, terra cotta tile, and cinder blocks. It's really a time-saver."
—Contractor

Model A-9"
3¼" capacity
$135.00
with metal case

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"We have found Fred W. Wappat Saws to be completely trouble-free ... powerful ... lightweight ... easy to handle—an invaluable aid in speeding up production." —Prefab. Bldg. Mfr.

Fred W. Wappat MAXAW gives builders maximum performance for a 6" saw!

The MAXAW features built-in depth adjustment (¼" to 2¼") and built-in bevel adjustment (0° to 45°). Has rugged, sturdy rip fence. The MAXAW cuts to full 2¼" depth, cuts 1 7/32" at 45° angle. Even though blade is filed many times, the MAXAW cuts 2" lumber. There are no extra gadgets—the MAXAW is a complete electric hand saw. That's why it's called "the 6" saw with Big Saw features!"

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Businessmen Should Demand Economic Solvency, Says Dr. Edwin G. Nourse

AN ECONOMIC policy of "slipping into deficits as a way of life" is "simply failing to face the realities," Dr. Edwin G. Nourse, former chairman, Council of Economic Advisers, Executive Office of the President, stated in a recent speech in Detroit.

Speaking before 1200 builders at the Twenty-second Annual Banquet of the Builders Association of Metropolitan Detroit, Dr. Nourse criticized the passage of a budget this current year that promises an additional 5.5 billion-dollar deficit to be added to one of 1.8 billion incurred at the end of 1949.

"In January 1949," Dr. Nourse said, "the President asked for a 4-billion dollar tax increase in order to provide for modest curtailment of the debt. . . . But then we came to the spring recession, and the President withdrew that request. I participated in that recommendation and I think it was sound under the circumstances. Four billion dollars of additional taxation would have complicated the problem of business in making adjustments in that first recession period. I think that action was all right, but the recession period gave way by August to one of very bracing advance.

"And what did we do? We proceeded to pass a budget for this current year, that we are now working under, which promises the country another deficit of 5.5 billion dollars."

Such additional deficit would wipe out the savings of the inflationary postwar period, Dr. Nourse stated. "I submit that that is a situation which undermines the solvency of our economy within which you (builders) have to do business, within which businessmen have to make their investment plans, which are the basis of your construction operations. That in my judgment is a very dangerous situation."

While one individual can't do much about this situation, Dr. Nourse explained that "the expression of a sober and sound and determined public opinion can change our national financial picture."

He concluded with an encouraging note in regards to the present attitude in Washington, where he said "there is a responsiveness at the present time such as there has not been before." A balanced budget would force some problems into a harder position this year, "and might even give us a year or two of less active and less profitable business and somewhat more unemployment," he stated. "But that is not too high a price to pay for assuring ourselves and the world that we have the determination and the know-how to put our affairs on a solvent basis.

"Public housekeeping isn't basically different from company housekeeping or from family housekeeping. All prudent men operate on essentially the same principle. Business in this country has habitually gone into debt. It has pushed the country forward because it went into debt when there were special needs of expansion to be met or when there were special emergencies that had to be coped with. But when reputable businessmen go into debt, they do so with a financial plan which is designed to see them through. They don't say, 'go on spending because it is nice to have a finer office or a bigger plant than the other fellow, and be unconcerned if it leads to bankruptcy.'"

Our public housekeeping, he explained, is not at the present kept according to the principles of good business housekeeping.

Among more than 50 NAHB honor guests at the speakers table were Thomas P. Coogan, NAHB president; Frank W. Cortright, NAHB executive vice president; John Weinhart, president, Detroit Builders Association, and Henry F. Fett, 1949 Detroit association president.

the move is to MASONRY Paint

BASED ON Vinylite BRAND RESINS

BAKELITE DIVISION UCC

Now masonry wall paint hits a new high in protection thanks to VINYLITE Brand Resins!

A two coat system based on these amazing materials shows exceptional resistance to weather, fresh and salt water, industrial fumes, oil, grease, cleaning solutions and most other chemicals. The plastic coating can be applied to brick, concrete, concrete brick, stucco, concrete block, cinder block or asbestos siding.

It can be applied to damp basement walls or to surfaces previously painted with other materials. It does not craze, check, peel or crack when it has been properly applied, nor does it chalk. Used on homes, apartments or office buildings, this VINYLITE Resin-based paint cuts upkeep costs.

It's particularly practical for factories, smelting plants, breweries and refineries where it withstands the corrosive fumes that eat into ordinary paints. Used as a coating for swimming pools (both in color and white) it has shown excellent resistance to fresh and salt water and disinfectants. In deep basements, the use of these coatings provides dry, clean and attractive walls.

Put this remarkable new paint to work for you! Get the complete story. Write Department HY-64.

Data on "VIRGOTE" Masonry Paint, courtesy The Malsbenrock Company, P.O. Box 1051, Cincinnati 1, Ohio

BAKELITE DIVISION, *Union Carbide and Carbon Corporation*, 30 East 42nd Street, New York 17, N. Y.

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CLIMBING VINE DESIGN
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Graceful hand-wrought Coffman iron porch posts improve the looks of any house, often increasing sales value tremendously! Yet these ornamental posts are quite inexpensive and are available through your lumber or building supply dealer. Use Coffman's distinctive No. 150 design for porch, breezeway, or balcony. All accessories are furnished for easy installation.

Tested by Pittsburgh Testing Laboratories

Careful testing under professional laboratory control gives accurate load carrying statistics, proves Coffman load carrying factors amazingly high. Corners will support 33,000 lbs., flat posts 850 lbs.

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UNIVERSAL PORCH POST
For Building or Remodeling

No. 150

One stock post, Coffman's No. 150, meets any height requirement from 6'-10½" to 8'-0". You simply cut off legs as needed. Comes complete with fittings. This is an outstanding design suitable for building or remodeling. Look for the traditional Coffman "large drawn tips" at inner ends of scrolls—the mark of true quality in ornamental iron.

Write Department A8, P. O. Box 1113, for free catalog of designs, sizes and prices.

Manufacturers of the Original
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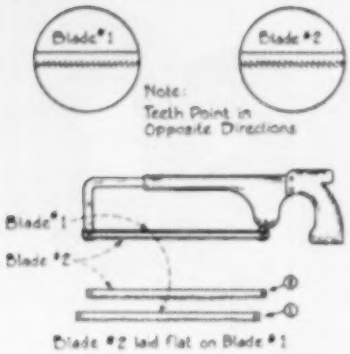
of Hand-Wrought Ornamental Iron

The R. J. Coffman Co. Inc.
ORLANDO FLORIDA

TECHNICAL GUIDE for Builders and Craftsmen



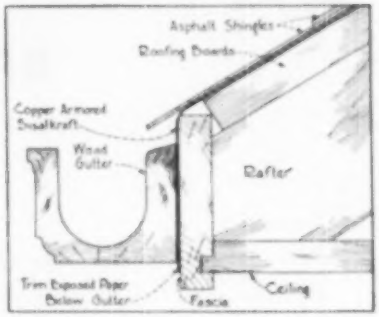
How to Cut Metal Mouldings With a Hack Saw

TO PREVENT blades from breaking when using a hack saw in cutting thin metal mouldings, bullnose trim or metal casings, proceed as follows:

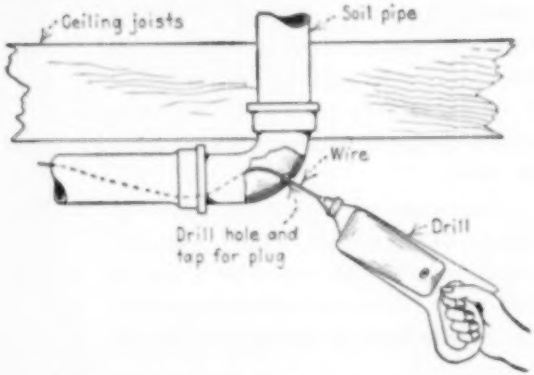
Place two blades in the saw frame at the same time, one against the other, with the teeth of one blade placed in the opposite direction from the other. By this manner the upstroke of the saw cuts the metal as well as the downstroke of the saw; it also eliminates hanging.—Submitted by W. L. Dodds, Branson, Mo.

How to Prevent Roof Leaks at Gutter

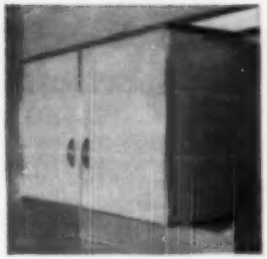
WHEN roof gutters are covered with ice encrusted snow the heat from the building causes the ice nearest the roof to melt. This water has no place to escape except between the facia and roofing boards. To prevent this lay the first roll of paper (preferably Sisalkraft) on the roof at the eaves, letting the paper extend to the bottom of the facia board. Install gutter on top of the paper, trimming excess paper below the gutter line.—Submitted by Warren J. Valentine, New York City.



How to Clean Out a Waste Pipe

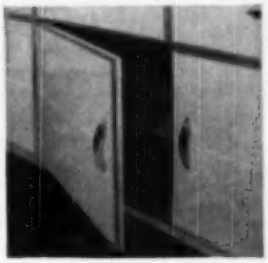


CLEANING out waste pipe for tub or other fixtures may be done quickly by using the following method. Drill a hole in elbow where it connects with the soil pipe, tapping the hole for a small plug. Insert baling wire into the pipe; attach one end of wire to an electric drill. When drill is turned on the wire whips around inside of pipe cleaning out debris.—C. A. Teudhope, North Girard, Pa.



CABINETS

To carry out the styling of the walls, Monowall can be applied to cabinets, too. It's easy to cement the panels in place. Monowall metal channels finish corners and provide a modern trim for the job.



DOORS

It's practical to use Monowall on doors and drawer fronts. Monowall is simply cemented over old fronts and trimmed with Monowall channels. In new work, an inexpensive plywood backing may be used.

COUNTERS

By using Monowall over a simple framework, counters can be custom built to save much-needed space. The counter shown here serves as a table, work surface, and a handy storage place for kitchen utensils.

Monowall gives your customers ideas

Monowall is the kind of material that sells your customers on the idea of remodeling. When that happens, you sell not just Monowall but the whole remodeling job.

Armstrong's Monowall is a versatile material. It offers customers a practical solution to the problems of repairing old walls and ceilings at a price they can readily afford.

Because it's an easy material to work with—easy to cut, shape, nail, and cement—Monowall may give the customer ideas for other uses, too. In this kitchen, for example, Monowall was used as a facing for cabinets, cupboards, counters, and even drawers. Monowall channels and moldings were used as a decorative trim for joints and edges.

Armstrong's Monowall has a strong appeal to the housewife. Its smooth, lustrous finish is durable and easy to clean. Monowall's attractive colors are completely up to date, all styled to the latest decorating trends by Armstrong's Bureau of Interior Decoration. In all, there are 22 different color and design combinations from which to choose.

If you're not already selling Monowall, get full details and prices from your Armstrong lumber dealer or write to Armstrong Cork Company, 1605 Lincoln St., Lancaster, Pa.

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93rd Anniversary — Mueller Climatrol REG. U. S. PAT. OFF.

Catalogs and

HOW-TO-DO-IT INFORMATION

734—PRIZE-WINNING DESIGNS—A report on the Wood Garden-Type apartment design contest, sponsored by the Timber Engineering Co., 1319 Eighteenth St., N.W., Washington, D.C., contains the prize-winning designs that were selected from among nearly 300 entries, representing work of architects and architectural students in 34 states and Canada. Copies available from above firm.

735—PERCUSSION WELDING METHODS—"Technical Advisor, No. 12," issued by Reynolds Metals Co., 2500 So. Third St., Louisville, Ky., discloses percussion welding methods which now make it possible to flash weld aluminum tubing directly to copper, stainless steel, Monel, or other alloys without regard to the dissimilar metals in the joint.

736—NEW DECORATING IDEAS—The largest catalog ever issued by the Sloan-Blabon Corp., 295 Fifth Ave., New York 16, N.Y., is now being offered to company's dealers. Full color reproductions of entire line, including 77 new designs, new decorating ideas and suggestions for doing over kitchens, hallways, bathrooms, utility, dining, sewing and hobby rooms are included. Catalog contains 228 pages.

737—COST SAVING TOOL—How one man with 240-pound Wayer Impactor can tamp and finish 45 to 60 square feet of material per minute is told in a new bulletin issued by Wayer Impactor, Inc., 12 N. Third St., Columbus 15, Ohio.

738—"BEFORE YOU BUILD OR BUY"—is the title of an informative easy-to-read booklet offered by Dow Chemical Co., Midland, Mich., that answers three questions faced by architects, contractors and home owners: (1) Is the house built right of right materials to give it a normal life expectancy? (2) Is there reasonable assurance that, in a few years, there will be no prohibitive maintenance costs? And (3) is the house so constructed that it will bring a high resale price?

739—HOW TO MAKE YOUR OWN—double hung and casement sash, trim, including base, shoe, crown and cove mold; window stop; raised panel doors; interior paneling; stair tread nosings; lipped cupboard doors; and drawer fronts is explained in new folders issued by the Boice-Crane Co., 966 Central Ave., Toledo 6, Ohio.

740—DOUBLE HUNG WINDOW WITH FRAME AND SASH—How to install Fleetlite aluminum windows in brick veneer, concrete block, frame or solid masonry construction, is shown with detail drawings in new literature available from Fleet of America, Inc., 110 Pearl St., Buffalo 2, N.Y.

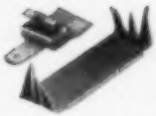
741—COMPLETE LINE OF FLOOR MACHINERY—Illustrations and specifications of a complete line of floor sanders, polishers, scrubbers and other machinery are offered in literature available from Lincoln-Schlueter Floor Machinery Co., 1250 W. Van Buren St., Chicago 7, Illinois.

742—HOLLOW STEEL DOORS—Colorful 4-page bulletin describing the USF hollow steel doors and frames is offered by United Steel Fabricators, Inc., of Wooster, Ohio. Bulletin features door applications typical in six major multiple dwelling projects for which they have been recently selected.

(Continued on page 134)

NOW...

COMPLETELY INVISIBLE PANEL ATTACHMENT PLUS ONE-TRADE APPLICATION WITH THE BEAUTIFUL NEW *Nu-Wood* LOK-PANELS



It's a big forward step in dry wall finish! Predecorated Nu-Wood LOK-PANELS permit amazingly fast application—completely invisible attachment—employing only *one* trade! New speed, economy and beauty result from three exclusive Nu-Wood features—big, predecorated panels with factory-machined interlocking joints, the Nu-Wood Hidden Clip for invisibly attaching the panels to intermediate studs, and the Nu-Wood Clip that fastens the panels to wall framing on tongue and groove edges. Here's why Nu-Wood Lok-Panels can bring you profitable business from satisfied owners . . .

AN ENTIRELY NEW IDEA IN DRY WALL FINISH

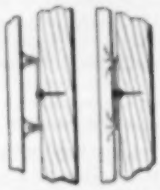
Here's the new Nu-Wood Hidden Clip that permits concealed, permanent application of Lok-Panels to intermediate studs. Notice how prongs spread to firmly embed themselves in the back of the Lok-Panels.

And here's the famous Nu-Wood Clip that locks the Lok-Panel edges together. The Nu-Wood Clip is reversible, fitting either into the groove or over the tongue of the panel.

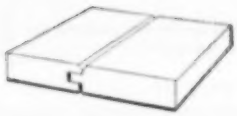
***NO FURRING STRIPS*—FASTER APPLICATION**—panels applied directly to framing members, either in new construction or existing rooms. Diagram shows Nu-Wood Hidden Clip being nailed to intermediate stud.

***BIG PREDECORATED PANELS*—32" wide, 8' and 10' long go up quickly.** Package of panels can be easily handled on the job. No paint or other surface finishes needed—no mess!

***NO JOINT TREATMENTS*—ONE-TRADE APPLICATION**—beautiful shadow-line edge removes the need for tape, wood strips or other joint-concealers. Diagram shows method of driving Lok-Panels on Hidden Clips.



***COMPLETELY CONCEALED ATTACHMENT*—no unsightly nail heads!** Diagram shows Hidden Clip before and after it is embedded in back of Lok-Panel.



***FACTORY-MACHINED INTERLOCKING JOINTS*—require no further treatment on the job, eliminate "broothing." Tongue and groove joint of the Lok-Panels receives Nu-Wood reversible clip for a tight joint.**

***SELF-ALIGNING SURFACES*—with Nu-Wood Clips, irregularities of the nailing base do not affect levelness—"floating" wall treatment permits normal movement of panel and base. Surfaces stay level.**

Sta-Lite ***Nu-Wood*** *Kolor-Fast*

A PRODUCT OF WEYERHAEUSER

DECORATING • ACOUSTICAL • INSULATING INTERIOR FINISH

WOOD CONVERSION COMPANY

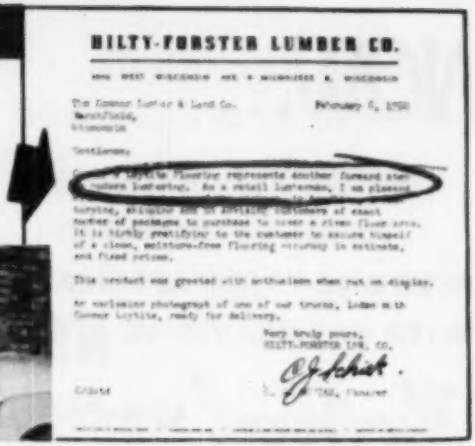
Dept. 119-50, First National Bank Bldg.

St. Paul 1, Minn.

*REG. U.S. PAT. OFF.

Connor "Laytite" Maple and Birch Flooring in Cartons is something new in flooring. It has new retail sales appeal for You and Your Customers. You can price it per carton. And your customers like the idea of a price per carton plus the clean, dry appearance of flooring kept in cartons. Quickly and easily, they are able to figure the exact cost of flooring a particular area. No other flooring offers you the selling features listed below.

Write today for the complete information and prices on Connor "Laytite" Flooring. Discover for yourself why lumbermen like Mr. C. J. Schiek of Hilty-Forster Lumber Co. are so enthusiastic in their praise. It's the world's finest flooring — bar none.



HILTY-FORSTER LUMBER CO.

The Connor Lumber & Land Co.
Marshfield,
Wisconsin

February 6, 1950

Gentlemen:

[illegible] flooring represents another forward step [illegible] flooring. As a retail lumberman, I am pleased [illegible] laytite, [illegible] customers of exact number of packages to purchase to cover a given floor area. It is highly gratifying to the customer to secure himself of a clean, moisture-free flooring accuracy in estimate, and fixed price.

This product was greeted with enthusiasm when put on display.

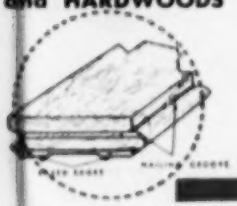
An enclosure photograph of one of our trucks, loaded with Connor Laytite, ready for delivery.

Very truly yours,
HILTY-FORSTER LBR. CO.

C. J. Schiek

C. J. SCHIEK, Owner

MIXED CARS — PINE, HEMLOCK and HARDWOODS



1. Carton keeps flooring clean and dry. It also keeps moisture content more uniform.
2. Carton makes inventory easy—contents clearly marked for grade and scale.
3. Carton gives buyers exact cost of flooring 10 square feet.
4. Carton saves time in laying mixed lengths without breaking several bundles.
5. Carton saves you money in reduced handling costs.
6. The flooring in each carton is manufactured and graded under MFMA specifications.

CONNOR "LAYTITE" FLOORING IN CARTONS OR REGULAR LENGHTS IN BUNDLES

The Connor Lumber and Land Co.

Sales Offices, Marshfield, Wisconsin

P.O. Box 112-M Telephone No. 3 or 418 Teletype—Marshfield No. 26

Catalogs

(Continued from page 132)

743—**LOUVERED WINDOW UNITS**—How a louvered type window manufactured by this firm keeps winter out and lets summer in is described and illustrated in literature available from Solar Air-Flo, Inc., Elkhart, Ind. Window units described can be installed in any and all kinds of wall construction. Unit is of modular design and comes assembled and ready to place, complete with exterior trim.

744—**INDIVIDUALIZED GARAGE DOOR DESIGN**—A Crawford Stylist garage door design sheet, available from the Crawford Door Co., 28-041 St. Jean Ave., Detroit 14, Mich., offers builders the opportunity to incorporate their own design ideas on Crawford garage doors. The Crawford Marvel-Lift Stylist door is called "The Garage Door of 1,000 Faces" by the manufacturers.

745—**EQUIPMENT FOR SMALL WOODWORKING SHOP**—Special cutters for windows, doors, cabinet work and screen doors, and supplies for many small power tools are illustrated and described in a 77-page catalog offered to builders and contractors by the Woodworkers Tool Works, 222-224 S. Jefferson St., Chicago, Ill. The catalog, No. 105, offers complete information in sizes and specifications.

746—**"MOULDINGS BY THE THOUSANDS"**—is title of a new bulletin issued by Power Tool Division, Rockwell Manufacturing Co., 400 E. Vienna Ave., Milwaukee 1, Wis. Up-to-date information on the Delta-Milwaukee line of 3-lip shaper cutters for use on any shaper that has ½-inch spindle is given. Diagrams show how cutters can be combined for various cuts.

747—**PORTABLE ELECTRIC TOOL LINE**—Tappers, drills, nibblers, screwdrivers, nut setters, hammers, saws, grinders, sanders, polishers, and other Thor tools are described and illustrated in a new 11-page catalog, No. E-2, offered by the Independent Pneumatic Tool Co., Aurora, Ill.

748—**PORTABLE WOODWORKING MACHINES**—Bulletin No. 1 issued by J. D. Wallace and Co., 134 S. California Ave., Chicago 12, Ill., illustrates and gives performance data on No. 1 radial saw with shop table and roller extensions. How-to-use information and specifications are included.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department (June, 1950)
American Builder,
79 W. Monroe St., Chicago 3, Ill.

Please send me additional information on the following product items, or the catalogs, listed in this department:

Numbers .....

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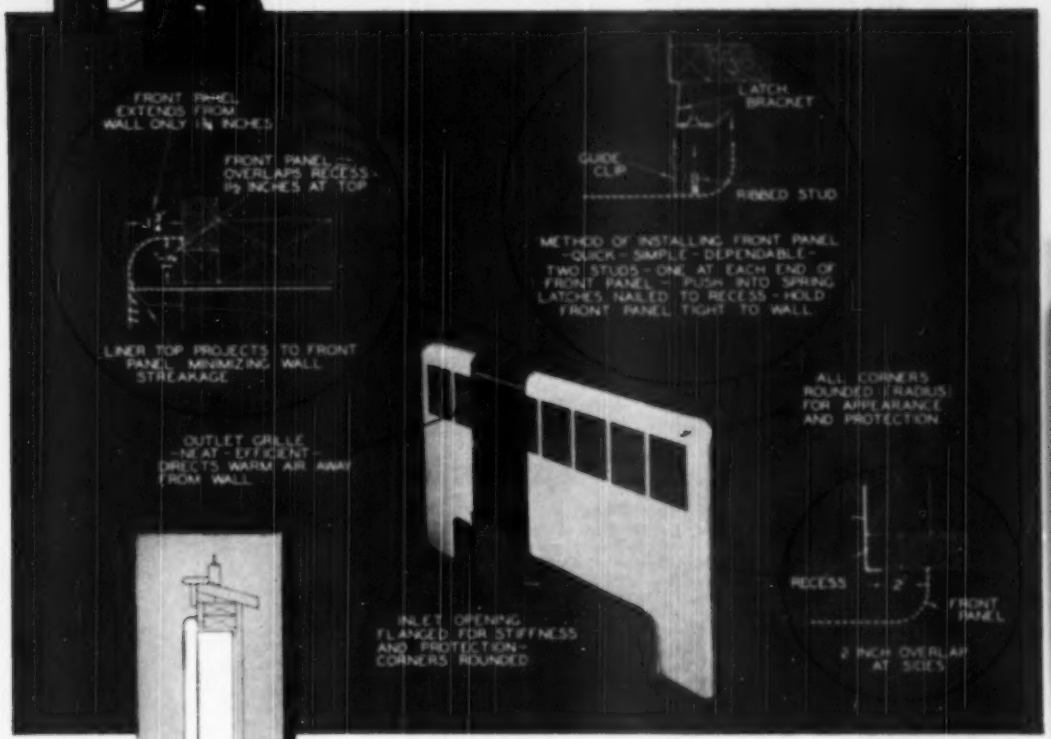
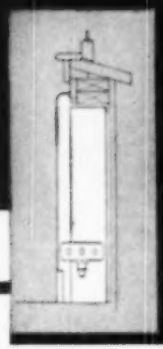
City ..... State .....

OCCUPATION* .....

* Please note that occupation must be stated if full service is to be given.

T&B TYPE R CONVECTORS DESIGNED *Exclusively* FOR RECESSED INSTALLATION





TYPE S *wall hung* CONVECTORS

Designed for commercial, institutional, and industrial installations. Send for Bulletin 500.

Appearance plus the space-saving feature of recessed convectors are important homeowner appeals. However, if ordinary cabinet type convectors are recessed, there is a good possibility that sooner or later, the wall plaster around the unit will crack and mar an otherwise satisfactory job.

Exclusively designed for recessed installation, Tuttle & Bailey Type R Convectors solve this problem. Constructed with a front panel that extends beyond edges of the recess, sufficient overlap is provided to cover the wall plaster line . . . and your customer is sure of a permanently neat, trim installation.

ASK YOUR JOBBER

TUTTLE & BAILEY inc

NEW BRITAIN, CONNECTICUT

"YEAH!"

"You *bet!* I'm putting Master No-Draft Sash Balances like this in every window. They give the windows smooth metal tracks to run on, and their counter-balancing springs make windows *easy* to raise and lower. Think what a *selling point* this gives me, *Joe*: *windows that always work right* . . . windows with no ropes to break, no pulleys to rust. But that isn't all! These Master No-Draft Sash Balances *weatherstrip* the windows, too. That means they keep out dust, dirt, wind and water . . . and cold, besides. What's more, they cost *less* to install, because they don't need pulleys, cords, weights or box-frames. And MAN . . . you ought to see how *easy* they are to put in!"

MASTER NO-DRAFT SASH BALANCES ARE PRECISION-MADE of the finest, highly-tempered non-corrosive metal. They can't rust. Springs are correctly-tensioned to give perfect balance of the upper and lower sash . . . and *easy*, fingertip operation. These sash balances are made in a factory that's recognized by the industry as outstanding for its efficiency and the craftsmanship of its workers.

SMOOTH OPERATION IS ASSURED by Master No-Draft Sash Balances, because they automatically adjust for shrinkage and expansion in the wood. Runways are completely metal-covered and require no painting. (Of course, cross-members should be installed). Double contact prevents rattle when windows are open.

USED BY THE U.S. GOVERNMENT AND PROMINENT BUILDERS all over the country, Master No-Draft Sash Balances are *tested to mechanical perfection*. They make windows neat and weathertight—and there's nothing to cause trouble. You can *forget maintenance!*

See Our Catalog in Sweet's 17a

NOTE: The Master No-Draft Sash Balance is the original patented combination sash balance and weather strip—and still the best

MASTER METAL STRIP SERVICE, INC.
1738 N. Kilbourn Avenue, Chicago 39, Illinois

Please send me, without obligation, complete information about Master No-Draft Sash Balance.

Name _____
Title _____
Address _____
City _____ Zone _____ State _____

NEW PRODUCTS

(*Continued from page 64*)

ADJUSTABLE TRUCK MIXER **AB53003**

Rex adjustable discharge Mero-Mixer can be elevated to a maximum height approximately equal to any high discharge type of mixer, or

elevated to any intermediate point in the hoist range. Makes for greater flexibility in getting concrete into forms. Rex chain drum drive. Marten steel drum and blades, and enclosed water system. Fluid drive for smooth operation. Chain Belt Co., Dept. AB, 1600 W. Bruce St., Milwaukee 4, Wis.

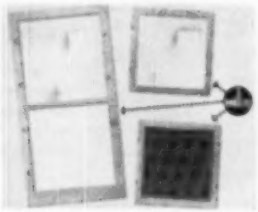
SIX-INCH JOINTER **AB55008**

New H & A 6-inch jointer combines a ¼-inch rabbeting capacity with a 60-inch by 8-inch table and a 37-inch fence for planing and ridging. Ribbed fence can be tilted to 45

degrees in the vertical plane and 7 degrees in horizontal plane. The latter permits shearing cuts in wood where grain tends to lift in ordinary cuts. Handwheels operate front and rear table heights and depth of cut, and are in easy reach from the front of machine, eliminating bending or stooping. Three cutter knives are safe to speeds of better than 6,100 RPM. All moving parts enclosed. Hestan & Anderson, Dept. AB, Fairfield, Iowa.

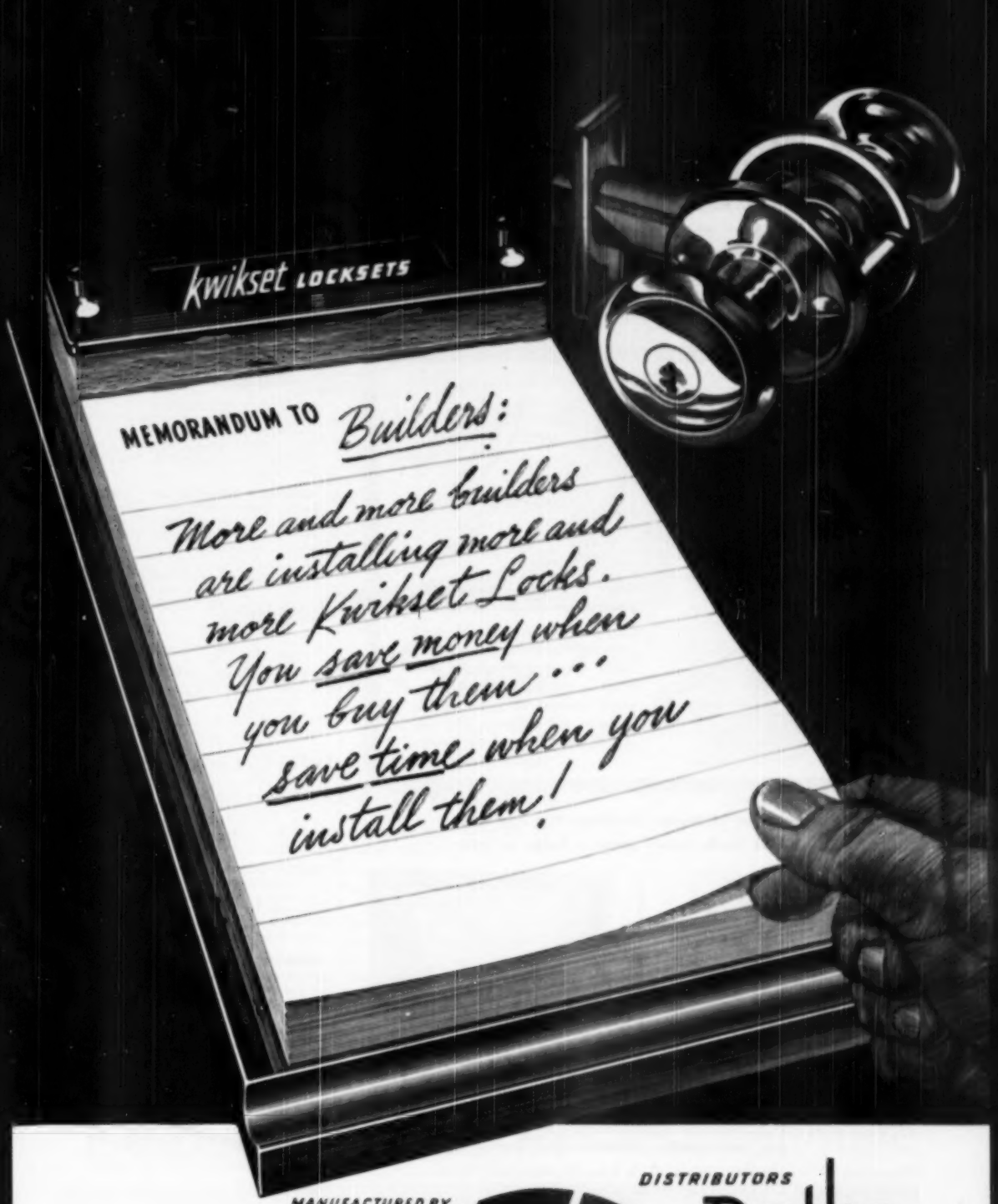
COMBINATION WINDOW **AB55031**

"Jiffy," a new wooden combination storm window with screen insert of bronze mesh, has a self-storing feature. Changed from screen to



storm in a few minutes with an ordinary household screw driver from inside the house. Made of clear pine, treated with special preservative, sealing wood against moisture. Smooth satin finish ready for painting to match window frame. Angel Novelty Co., Dept. AB, 340 Broad St., Fitchburg, Mass.

(*Continued on page 138*)



MANUFACTURED BY

Kwikset LOCKS INC. ANAHEIM CALIF.

Feature For Feature....
Dollar For Dollar.....
You Can't Beat Kwikset!

DISTRIBUTORS

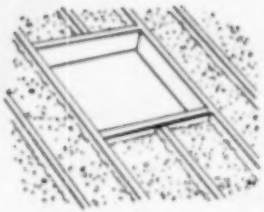
Petko INDUSTRIES, INC.
1107 East Eighth Street
Los Angeles 21, California

How to make provision for attic fans in your homes

It is a simple matter to plan new homes so that they can be made comfortable throughout hot summer months. The two steps described below will save money for owners by providing for inexpensive installation of package attic fans, the most economical and practical means of cooling an entire house.

Step 1. Frame for ceiling opening over hallway.

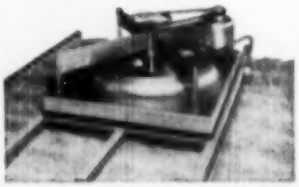
By framing and installing fan when home is built, no extra construction expense is involved. If installation is to be made later, framed opening can be temporarily plastered over or closed with plywood.



Step 2. Provide adequate louvres in proper location.

On new construction it costs very little to include ample exhaust openings to handle attic ventilation. These may be gable louvres or porch, soffit or basement exhausts, depending on the design of the house.

Installation of Hunter Package Fan can then easily be made when home is built, or later



This new fan is a compact unit, with built-in fan, motor and suction box. Fits low-clearance attics. Certified air delivery ratings for any size home or climate.

Automatic or pull chain shutters are quiet, tight-closing. Fit narrow hallways. Soft ivory finish (baked enamel) harmonizes with the color scheme of any room.

MAIL FOR COMPLETE CONSTRUCTION DETAILS

Hunter Fan and Ventilating Company, 381 S. Front St., Memphis 2, Tenn.

Send copy of "How to Cool for Comfort" to:

Name ..... Firm .....

Address ..... City & State .....

Hunter Package Attic Fans

NEW PRODUCTS

(Continued from page 136)

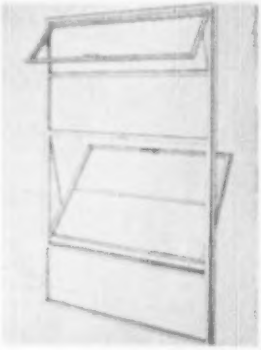
TREE MOVER **AB55005**

Continental tree mover handles trees with 50-inch diameter balls. Three-wheel suspension of mover affords mobility to reach trees easily,

and to plant them in difficult places without injury to lawn or other plantings. Unit straddles hole, or can be backed up to it for direct lifting or lowering of trees. Rear wheels adjustable for hillside stability. The DoAll Co., Dept. AB, Des Plaines, Ill.

ALUMINUM WINDOW **AB55023**

Lupton "Master" aluminum window has extra deep sections, welded construction, and precision weathering. Designed especially for schools, hospitals and office buildings, win-



dows can be glazed inside or outside. Windows will accommodate glass up to 1/2-inch thickness. All hardware is made of aluminum. Screens of aluminum are also available. Michael Flynn Manufacturing Co., Dept. AB, 700 E. Godfrey Ave., Philadelphia 20, Pa.

BENDING DEVICE **AB55028**

Tol Handy-Bendy instantly makes uniform bends in any desired degree, including offsets in 1/2 and 3/4-inch rigid, EMT thin wall or aluminum conduit. No special adjustments necessary. It has a measuring gauge and bend degree indi-

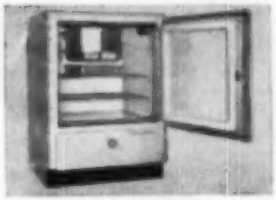
cator to control precision bends made by inexperienced workmen on the job. Recommended for use in open or slab work, or any other job where small or large numbers of bends are required. Operates easily, without special knowledge. Made from lightweight metal, yet is strong and rigidly constructed. Weight, 30 pounds. Tol Bender, Inc., Dept. AB, 417 N. Water St., Milwaukee 2, Wis.

(Continued on page 140)

...of course, it's electric!

- Easily Installed
- Eliminates Garbage Mess
- Double-Edged Shredders and Reversing Switch for Long Life

- Three 5-heat "COROX" Units
- Electric Appliance Unit
- Extra-Large, Two-Temp Oven
- Fiberglas Insulated



- Reversible Door
- All-Steel Construction
- Economizer Mechanism
- 5-Year Protection Plan

Short on Space?

Here's Electric Kitchen Efficiency in Only 60 INCHES of Wall Space

Here's how to conserve space . . . or provide more room for family living in small homes, apartments or cottages. Ideal for use in remodeling of single dwellings into multiple-family units.

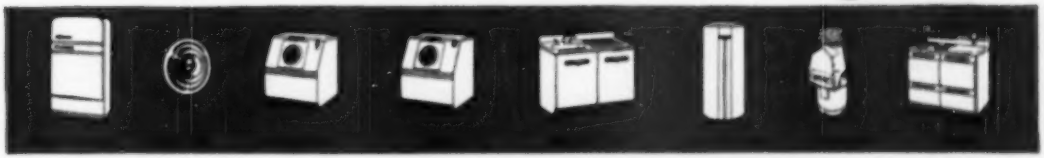
The Westinghouse Electric Range provides ample cooking capacity. The Under-Counter Refrigerator provides 8 square feet of refrigerated shelf area. The sink bowl and drainboard are stainless steel. Can be equipped with the added convenience of a Westinghouse Waste-Away Electric Garbage Disposer. Two 30-inch steel wall cabinets complete the unit. It's a marvel of efficiency that will win the approval of your customers or tenants.

WESTINGHOUSE ELECTRIC CORPORATION

Appliance Division • **Mansfield, Ohio**

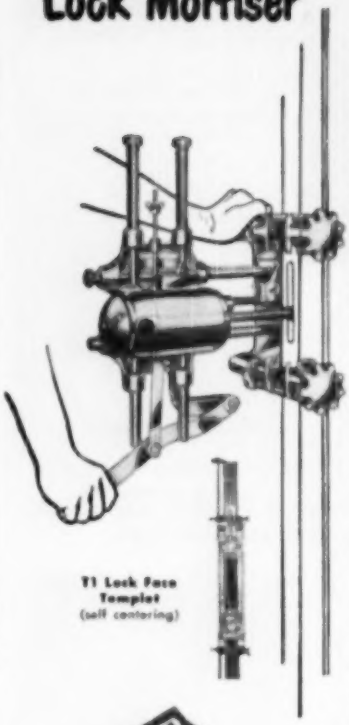
Plants in 25 Cities—Offices Everywhere

YOU CAN BE SURE..IF IT'S Westinghouse



Make the toughest job easy

with Stanley-Carter Lock Mortiser



T1 Lock Face Templet (self centering)

Machine perfect lock mortises made as easily and simply as a saw cut. Every mortise perfectly centered. Height rods and self-centering clamps cut down time from door to door. Less than a minute to change adjustments for different size locks. Average time per mortise only a minute . . . up to 400 doors a day. Simple ratchet device gives automatic feed. Full horsepower motor. Mortiser weighs only 26½ lbs., lightest, sturdiest lock mortiser on the market.

STANLEY®

This trade mark on electric tools tells you the most important thing you want to know about tools

No. 24 ¼" Electric Drill

When you buy an electric tool you have to take somebody's word about gears, motor, bearings, shaft, switches, power, etc. Whose word about tools could be more reliable than the word of "Stanley" . . . tool makers for over 100 years. On electric tools the name, Stanley, means that the tools are quality built, thoroughly tested and honestly rated. Covered by a generous guarantee and serviced by a network of Stanley Service Stations. See your industrial distributor or write for complete catalog. Stanley Electric Tools, 492 Myrtle St., New Britain, Connecticut.

J4A Power Plane, ½ h.p., with cutter grinding attachment and bench bracket for converting to bench jointer

STANLEY
Reg. U.S. Pat. Off.

HARDWARE • TOOLS
ELECTRIC TOOLS • STEEL STRAPPING • STEEL

NEW PRODUCTS

(Continued from page 138)

SWING LOADER **AB55016**

Compact 180-degree swing loader, of ⅜-yard capacity, is operated by four simple hydraulic cylinders which hoist and lower, swing to right or left, and open and close its bucket. Swinging

boom permits loading from 9-foot wide swath, and dumping into trucks without backing, turning or maneuvering of the machine. Can work in space 15 feet wide. Bucket clearance is 8 feet 2 inches. No gear shifting needed to reverse. Traction speeds from 1½ to 15 M.P.H. Model 58. The Mandt Manufacturing Co., Dept. AB, Columbus 8, Ohio.

STAIR GAUGE **AB55027**

Elinson stair gauge enables contractor or carpenter in 10 seconds to measure both correct length and end angles for stair treads, risers, shelves for closets, cupboards, bookcases and

all other inside measurements. Boards are then marked and cut for perfect fit. Easily adjustable to any length from 20 inches up, and each end pivots and locks at any angle. Skirt boards for staircases can be cut first and put in place, without need for fitting them carefully, then treads and risers are measured, cut and placed between skirt boards. Elinson Tool Co., Dept. AB, 2119 E. 56th St., Minneapolis 17, Minn.

GRADER ACCESSORY **AB55006**

Accessory unit to increase utility of Model D Allis-Chalmers grader is an hydraulically controlled "Windrow Eliminator." On shoulder maintenance jobs, this accessory clears off ex-

cess material which grader moldboard usually piles up along the road's edge. Reconditions road shoulders in one pass, eliminating extra trips. Eliminator rides on its own wheels. Blade settings are not affected by up and down movement of grader. Easily mounted on grader frame by four heavy bolts and two 1⅛-inch pins. Tractomotive Corp., Dept. AB, Deerfield, Ill.

(Continued on page 142)

Working for you...

"The finest *constructive* selling service ever produced for the building industry..." that's what hundreds of leading retail lumber dealers, and others in the small home merchandising field are saying about the great new book, "Planning Your Individual Home", just published by the National Plan Service, Inc., 1315 West Congress Street, Chicago. This book, of ninety-six playing-card-thickness pages, 15"x 20" in size, printed in full color, is a comprehensive new home presentation without parallel. Write to your own Association Secretary or to the National Plan Service, Inc. Start this book working for you!

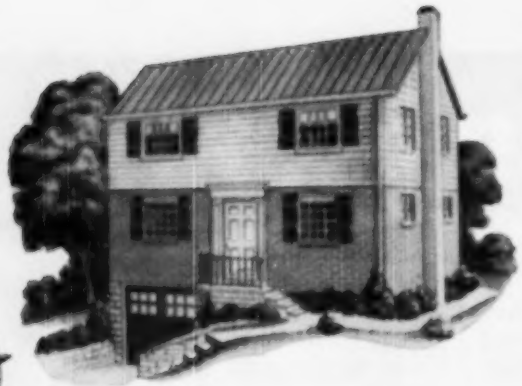
Working for you, too, is the famous Certigrade Label, found under the bandstick of every bundle of shingles produced by the scores of outstanding Shingle Manufacturers who compose the Red Cedar Shingle Bureau. "Certigrade Shingles", all quality-inspected and guaranteed up to grade, can be sold by you with the assurance that they will bring repeat business. Use the new National Plan Service book to sell new shingle homes. Insist on the Certigrade Label and keep it—Working for You!

CERTIGRADE

RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle, Washington

Metropolitan Building, Vancouver, B. C., Canada



"There's extra sell-power in that FOLLANSBEE terne metal roof!"

- IT LASTS A LIFETIME
- IT FITS INTO BUDGET HOUSING
- IT BELONGS IN ANY DESIGN OR COLOR SCHEME

Buyers have confidence in Follansbee Terne Metal Roofing because they know it will last a lifetime. Yet it's never out of style because it can be painted to match, or contrast with, building trim.

These Follansbee Terne Metal Roofing features increase the sell-power of modern homes by increasing the pulling-power on home-buyers. They're the features you can incorporate in housing of all classes because Follansbee Seamless Terne Roofing is moderately priced.

More and more home buyers will be asking about Follansbee Terne Roofing. To help you answer their questions we've prepared a little booklet entitled "Beautiful Lasting Roofs of Follansbee Terne". Send for a copy, today.

FOLLANSBEE STEEL CORPORATION

GENERAL OFFICES, PITTSBURGH 30, PA.

COLD ROLLED STRIP • ELECTRICAL SHEETS • POLISHED BLUE SHEETS
SEAMLESS TERNE ROLL ROOFING

Sales Offices—New York, Philadelphia, Rochester, Cleveland, Detroit, Milwaukee. Sales Agents—Chicago, Indianapolis, St. Louis, Kansas City, Nashville, Houston, Los Angeles, San Francisco, Seattle; Toronto and Montreal, Canada. Plants—Follansbee, W. Va.

Follansbee Metal Warehouses
Pittsburgh, Pa., Rochester, N. Y., and Fairfield, Conn.

NEW PRODUCTS

(Continued from page 140)

TRIPLE-ACTION MIXER **AB55012**

DeLuxe Wonder Hoe-Type mixer, for use in mortar, plaster and concrete products work, has 6-cubic-foot capacity and features "triple hoe" mixing action. Sealed hoe and jack shaft bear-

ings, renewable blades, telescoping axle and adjustable scraper blades. Available with caster-type wheels, which cut over-all width to 31 inches to permit portability when doing inside work. Can be equipped with special grating and bag splitter. Construction Machinery Co., (Dept. AB), Box 120, Waterloo, Iowa.

WATER SOFTENER **AB55035**

Cul-Matic zeolite water softener combines features of a permanently installed, home owned appliance with service features of the nationwide Culligan Soft Water Service plan. Push-

button control reduces regeneration of the unit to a few minutes personal attention. Ingenious valve automatically salts, rinses and returns the softener to service. Automatic drain device refills the appliance with water, eliminating spillage. Culligan Zeolite Co., Dept. AB, Northbrook, Ill.

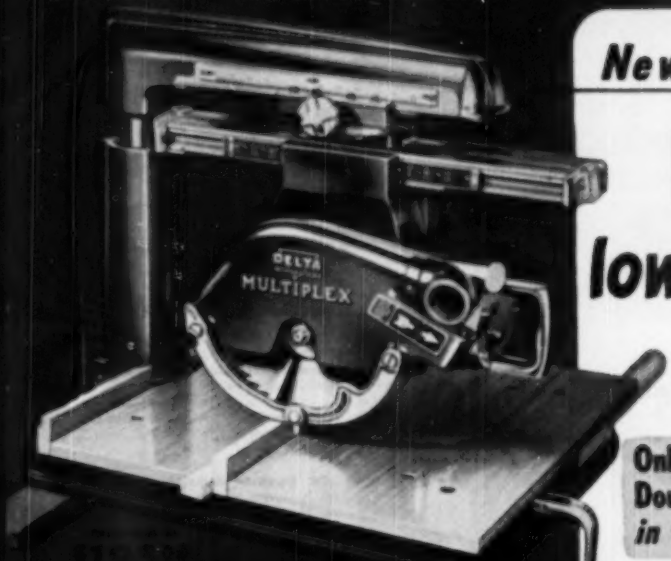
POWER WHEELBARROW **AB55017**

Moto-Bug, 1950 model, has large steering wheel

with 4 to 1 gear ratio. Rated hopper capacity is 10 cubic feet, or 1,200 pounds on platform body. Powered by standard 4 H.P. gasoline engine, and travels at speeds of 1½ to 6 M.P.H., forward and reverse. Kwik-Mix Co., Dept. AB, Port Washington, Wis.

(Continued on page 144)

A SAFER RADIAL SAW



New DELTA® MULTIPLEX®

low-cost, portable job shop!

Only Delta Multiplex—with exclusive Double Radial Action—has safety *built in* to protect you in *all* these ways!

1. Table fully supports your work — saw stays on table for entire stroke.

2. Saw always remains on table — even when ripping wide panels in half.

3. You move cutter along with the stock past the cutters, when shaping, etc.

4. Elevating handle is right up front — you crank easily, quickly, safely.

5. All levers, locks, degree scales are also up front — you set up faster.

6. Cutting is "centralized" in a common area — you're always safely bandsawed.

7. Motor start-stop switch is always handy—right at your fingertips.

8. Automatic safety guard fully enclosed saw. Adjustable kickback with splitter.

9. Saw works from one guide fence — quickly adjusts from narrow to thick stock.

Only Delta Multiplex gives you *all* these safety features *at no extra cost!*

Learn more about Delta Multiplex these 3 ways:

FREE MOVIE!
Sound — Action — Color!
Ask your dealer to show you this film.

FREE DEMONSTRATION!
Ask your dealer to demonstrate Delta Multiplex in action.

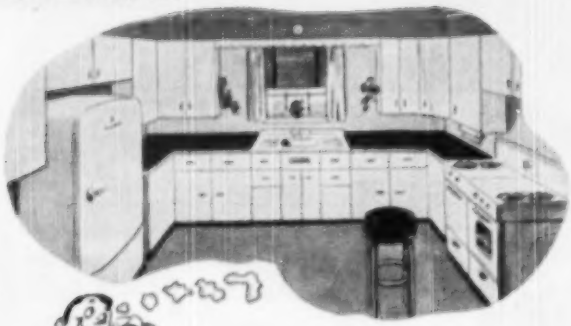
FREE IDEA BOOK!
20 pages showing unlimited uses of Delta Multiplex. Send coupon for your copy.

TEAR OUT COUPON, AND MAIL TODAY!

Power Tool Division
ROCKWELL MANUFACTURING CO.
6346 S. Vienna Avenue, Milwaukee 1, Wisconsin
Send me new Delta Multiplex catalog, "Unlimited Applications"

Name _____
Title _____
Company _____
Address _____
City _____ ( ) State _____

A Pyrofax Gas Kitchen . . .

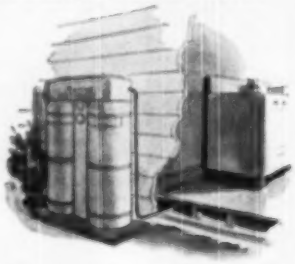


makes SALES EASIER FOR YOU!

Put into your houses what home "shoppers" want . . . *and they'll buy!*

Two out of three women prefer gas for cooking. Beyond the mains, this means PYROFAX Gas not only for cooking, but for refrigeration and water heating as well. It's the cleaner, faster, more economical, more dependable fuel . . . gives instant, even heat.

No matter where you build, you can install PYROFAX GAS . . . the low cost fuel for *modern* kitchens. Installation is quick and easy . . . no expensive wiring, no construction changes. PYROFAX Gas is piped in direct to range, refrigerator or water heater from twin cylinders outside the house.



Let us show you how PYROFAX GAS saves on building costs . . . makes sales easier for you!

Nationally Advertised Appliances

Magic Chef and Caloric ranges, Servel refrigerators, Ruud and Bryant water heaters, and other gas appliances are available for use with PYROFAX Gas—from distributors in 30 states east of the Rockies.

Pyrofax TRADE MARK

Superior BOTTLED GAS Service

For full information see SWEET'S CATALOG, or address Dept. AB.

PYROFAX GAS DIVISION

Union Carbide and Carbon Corporation

30 East 42nd St. UNC New York 17, N. Y.

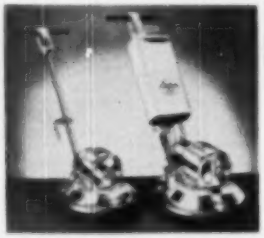
"Pyrofax" is a registered trade-mark of Union Carbide and Carbon Corporation.

NEW PRODUCTS

(Continued from page 142)

FLOOR MAINTENANCE MACHINE AB55034

New improved American DeLuxe floor maintenance machine, designed for dry or wet cleaning and maintenance operations on a great variety of floors, is offered in a new range of



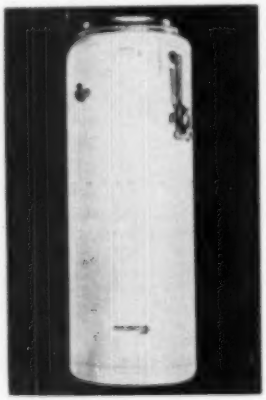
sizes, including 14 and 16-inch brush spread. Polished aluminum castings throughout. Adjustable handle can be easily set at any desired angle through full 90-degree swing. Handle can also be quickly detached for storing or transporting. American Floor Surfacing Machine Co., Dept. AB, 511 South St. Clair Street, Toledo 3, Ohio.

OUTDOOR RUBBISH BURNER AB55026

Model 20, outdoor rubbish burner, is designed to assure that waste contents are completely fired. Weather-resistant outer casing is of heavy galvanized steel. Grate basket of electrically welded steel rods hangs on hooks inside. Surrounding space is ample for free circulation of air currents induced by the vents in casing. Basket holds two bushels of trash. Tapered smoke hatch can be tilted back on its hinges, allowing full access to grate basket opening. The Majestic Co., Dept. AB, 300-A Erie St., Huntington, Ind.

GAS WATER HEATER LINE AB55030

Heaters are fully automatic, underfired, center flue units, with snap action thermostatic controls and 100 per cent automatic safety pilot and shut-off safety valve. Extra heavy, hot dip gal-



vanized, copper bearing steel tanks are tested for 355 pounds pressure and 150 pounds working pressure. Completely blanket insulated. Cathodic protection by replaceable magnesium anode to extend tank life is optional. Offered in 20, 30 and 40-gallon capacities. I. O. Keyes & Brother, Inc., Dept. AB, 154 Ogden Ave., Jersey City 7, N. J.

(Continued on page 146)

Window shopping stops here...

The most intensive of all "window shopping"—that of the architect and builder—must stop at the sight of Reynolds Aluminum Casements. Their superiority in design and especially in *finish* is outstanding. Their flash-welded corners assure maximum rigidity and weathertightness. Their roto-operation is smooth and dependable. And of course they have the basic advantages exclusive to aluminum windows: rustproof permanence with no need for protective painting, narrow frames of neutral tone to harmonize with any concept.

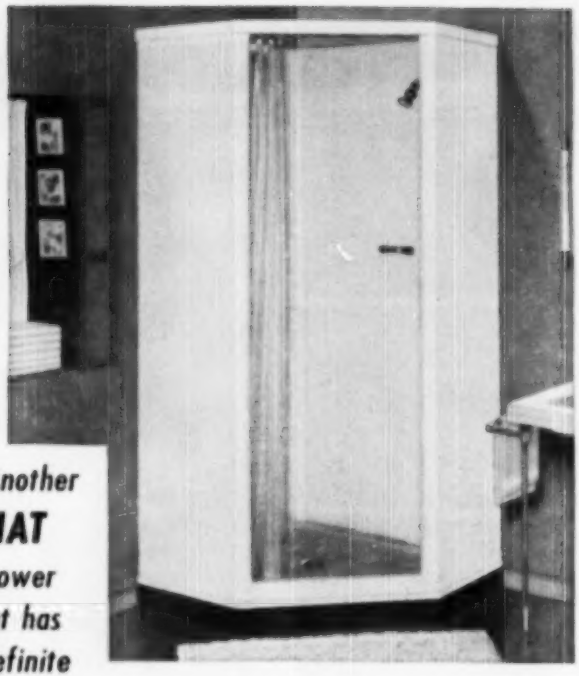
Reynolds supplies residential casement, fixed and picture windows in all combinations, standard and western types...also Reynolds Aluminum Screens to fit these and all metal casement windows. *Stop right here* and write for complete descriptive literature in A.I.A. file form. **Reynolds Metals Company,** Building Products Section, 2003 South Ninth Street, Louisville 1, Ky. Offices in 32 principal cities.

...and so does all Casement Screen shopping!

Reynolds Aluminum Screens fit not only Reynolds Windows but all Aluminum and Steel Casements. Exclusive corner lock feature assures great rigidity and high spring tension to keep the cloth tight. Where you are buying new windows, specify Reynolds Aluminum Windows complete with Screens. Where you must screen other casements, do it with Reynolds Aluminum Screens. See your dealer!

REYNOLDS ALUMINUM RESIDENTIAL CASEMENT FIXED AND PICTURE WINDOWS

REYNOLDS ALUMINUM



. . . Another **FIAT** Shower that has a definite advantage for Builders . . .

Corner Cadet MODEL 21

Wherever a corner type shower is specified the Fiat Cadet Model 21 is a perfect natural for the job; much lower in cost than any built-up type corner shower. The graceful lines of the Corner Cadet blend smoothly into the bathroom walls to give the effect of a custom built installation. Its beauty is in harmony with the finest bathroom fixtures.

The Fiat Dolphin or Zephyr glass door is available for the corner Cadet and adds materially to the appearance and utility of the shower installation.

The usual Fiat high quality of construction and materials are used throughout. Bonderized galvanized steel walls finished in white baked-on synthetic enamel. Special colors available on order. No exposed screws give a smooth sanitary interior. Overall size 36" x 36" x 80".

The corner Cadet is one of our most popular shower models.

Use coupon for catalog of complete line of Fiat showers.

FIAT

FIAT METAL MANUFACTURING CO.

THREE COMPLETE MANUFACTURING PLANTS

(Chicago area plant) Franklin Park, Ill.,

Long Island City 1, N. Y. **Los Angeles 33, Calif.**

In Canada: Fiat showers are made by Porcelain and Metal Products, Ltd., Orillia, Ontario

Please send catalog of Fiat Showers, Receptors and Doors.

NAME _____

COMPANY _____

STREET _____

CITY _____ ZONE _____ STATE _____

FIAT METAL MFG. COMPANY • 6301 Belmont Ave. • Franklin Park, Ill.

NEW PRODUCTS

(Continued from page 144)

TWO-DRUM BELT SANDER ABS5014

Two-drum belt sander can be used on all woods, metals and plastics. Weight, 8½ pounds. Belt sanding area is 3x5½ inches with replacement belts available for all types of material. Spring tensioning device makes various size

belts, from 3x23½ inches up to 3x24½ inches, available for use. Flush right side of tool makes it ideal for sanding in corners and against upright objects. Ball and self-lubricating bronze sleeve bearings. Pedestal stand is available to convert belt sander to a bench sander. In this position, unit can be used for sharpening chisels and knives. Mall Tool Co., Dept. AB, 7717 S. Chicago Ave., Chicago 19, Ill.

TUB AND SHOWER FIXTURE ABS5033

Queen Mary Adjusto tub and shower fixtures offer ease of installation and accessibility of exposed fixtures and appearance of concealed fixtures combined. Consists of compact rough brass valve with adjustable unions, which mounts on face of the wall, with chrome plated brass escutcheon, handles, and Adjusto arm and shower head. Plumber roughs in ½ inch I.P.S. nipples on 6-inch centers, about 30 inches above top of tub. No danger of damage or theft. Milwaukee Flush Valve Co., Dept. AB, 301 E. Reservoir Ave., Milwaukee, Wis.

GRAVITY GAS FURNACES ABS5029

Model No. GF700-905 has input capacity of 90,000 B.T.U.'s and casing width of 27 inches, depth of 27 inches and height of 48 inches. Model No. GF700-1205 has input capacity of 120,000 B.T.U.'s, casing width of 29 inches, depth of 29 inches and height of 56 inches.

Features of these units include all steel, permanently gas-tight combustion chamber and heat exchanger, and cast-iron burner designed with 312 drilled jets to provide tapered, cone-like flame of exceptional burning qualities and quiet operation. Fully approved by AGA for natural, manufactured and mixed gases. Completely automatic. Norge Heat Div., Dept. AB, Borg-Warner Corp., 672 E. Woodbridge St., Detroit 26, Mich.

(Continued on page 148)

SERVING WASHINGTON, D. C.— The Shirley-Duke garden apartments for 2,106 families in Alexandria, Va., will rent at $59.75 for one-bedroom units and $72.50 for two-bedroom. Read why its builders selected NORGE Refrigerators.

NORGE REFRIGERATORS Selected for Trail-Blazing Low-Cost Housing!

In a full-page ad over its own signature . . . Washington Post, March 5th . . . the management of Shirley-Duke Apartments stated:

"Like every item selected for these lovely apartment houses, we, the builders, spent considerable time in deciding on the make of refrigeration that would give our tenants the best in this type of home appliance which plays such an important role in their daily lives.

"The choice — NORGE.

"Norge is a symbol of the high-type construction, workmanship and material that have gone into this ideally located development in nearby Alexandria, Virginia."

And so say more and more builders and developers throughout America — the kind that make the trends and look forward to protected investments. There's a Norge to fit every need. Send coupon for full details.

SEE NORGE BEFORE YOU BUY

SEE THE FEATURES OF AMERICA'S FINEST HOME APPLIANCES

NORGE Division, Borg-Warner Corporation
Dept. AB-550, Detroit 26, Michigan
Att: Director of Contract Sales

Send me more information on the following appliances

- ☐ Refrigerators
- ☐ Automatic Washers
- ☐ Electric Ranges
- ☐ Water Heaters
- ☐ Gas Ranges
- ☐ Home Heaters

Name _____ Title _____

Company _____

Street _____

City _____ Zone _____ State _____

REFRIGERATORS • SPACE HEATERS • AUTOMATIC WASHERS
GAS AND ELECTRIC RANGES • ELECTRIC WATER HEATERS

It's the RIGHT ANGLE for Tough Spots...Faster Jobs

CUTTING COSTS

YOU'LL be amazed at the cost-cutting, time-saving and accurate performance — in both construction, and plant maintenance — of this remarkable new Tri-Speed HOLE SHOOTER with its 2-speed "Right-Angle-Drive" attachment. See complete kit below.

This tool not only speeds up work in the tightest corners, but also provides the right speeds for boring with bits of every size, including expansive bits and hole-saws. Pays for itself on a couple of jobs. Also suitable for drilling in steel, and concrete with carbide-tip drills.

See Your Distributor

If he cannot supply you, write us and mention his name. Immediate delivery. "You'll buy if You'll Try".

MILWAUKEE ELECTRIC TOOL CORP.
5356 West State Street, Milwaukee 8, Wisconsin

Milwaukee TRI-SPEED Kit for Contractors . . .

1 S-412 ½" HOLE SHOOTER, ball and roller bearing equipped . . . Jacob's geared Chuck . . 450 R.P.M.

2 *Two-Speed "Right-Angle-Drive" attachment . . . low side: 300 R.P.M. . . . high side: 675 R.P.M.

3 3 special bits for boring in wood—¼", 1⅛" and 2⅝".

4 Special wrench for attaching and adjusting "Right-Angle-Drive" and Chuck.

$79.70

Adjustable "Long Arm" Accessory . . . $24.50 EXTRA *Pat. Pending

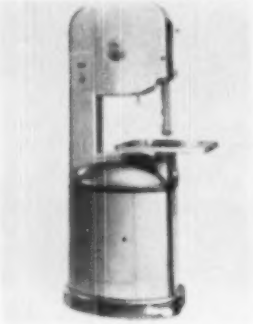
Milwaukee QUALITY TOOLS

NEW PRODUCTS

(Continued from page 146)

WOODWORKING MACHINES ABS3004

"J-Line" woodworking machine has cast-iron base and steel frame. Motor, vee-belt drive and lower wheel are enclosed by pressed steel covering which is insulated by rubber beading.



The 24x24-inch table is supported on double trunnions, and tilts 45 degrees right and 12 degrees left. Hinged table section permits easy removal of blade without twisting. Top guide is counter-balanced. Bearings are lubricated for life. For millwork and light production plants. Yates-American Machine Co., Dept. AB, Beloit, Wis.

ONE-PIECE GARAGE DOOR ABS3022

"Essential" knee-action one-piece garage door stays entirely within the building in up position,

with no kick-out at the bottom. Can be opened from inside without stepping, tugging, or crawling over car. Easy to install, and no costly framing is needed. All metal parts are heavy duty. Essential Products Corp., Dept. AB, Little Chute, Wis.

General Electric's 'Birth of A Salesman' Visited 45 Cities

"The Birth of a Salesman," a full-scale stage production dramatizing the problems of appliance dealers and salesmen, has been presented by the General Electric Co. to its representatives throughout the country. Three troupes recently completed tours and approximately 30,000 persons saw the production.

The show was professionally written and produced; and the cast was made up of stage, screen and radio performers. Total cost of all the productions was more than $500,000.

In the Weyerhaeuser 4-Square Home Building Service there are scores of modern homes . . . each the work of an able architect specializing in small home design.

Sixteen of these designs, according to the blueprint orders we have received, have proved of outstanding popularity. They repeat again and again. One is illustrated above.

A "Best Seller" is a good home to build and feature, because it has basic appeal that attracts more home buyers . . . makes more sales.

These 4-Square homes offer other advantages . . . they are engineered for fast, accurate construction . . . for the use of standard sizes of ready-to-use 4-Square Lumber which go into construction without needless sawing, fitting or material waste. Other standard, mass-produced materials are specified to take every cost-saving advantage.

It will pay you to see your 4-Square Lumber Dealer . . . see all the designs in this Building Service . . . complete blueprints, material lists and easy estimating forms are available for each design. You will like these designs. You will see in them great values for you as a builder, and for your prospects as home owners.

Weyerhaeuser

4-SQUARE LUMBER AND SERVICES

WEYERHAEUSER SALES COMPANY, ST. PAUL 1, MINN.

Build for Greater Value with the
4-SQUARE BUILDING SERVICES

THE BEST CRAFTSMEN ALWAYS TAKE PAINE'S...

IN NEW BUILDINGS OR OLD...

PAINE
Spring Wing
TOGGLE BOLTS
cut fastening and hanging costs

Whether you are building a new home or office or are repairing an old building you'll have no fastening problems if you use Paine Spring Wing Toggle Bolts. Spring Wing Toggle Bolts provide a secure and permanent fastening in hollow walls and ceilings and other hollow spots where it is impossible to reach the other side. They may be used in wood, gypsum, marble, lath and plaster, tile and sheet rock. They are especially useful for installing heavy shelves, partitions, wall mirrors, lights, and plumbing fixtures.

For the big user, try Paine's Toggle Bolt Clamp that grips the bolt when it is to be tightened, so it can be tightened with a screwdriver. It cuts installation time in half and saves the mechanic's fingers. Get Paine Toggle Bolts from your supplier today.

Just drill a hole. Unscrew wing. Put bolt through item to be fastened. Thread wing back on bolt. Push wing through hole.

The wing springs open when through hole. Pull on bolt while tightening to prevent wing turning.

When hanging objects that must be moved periodically, use a nut and washer as shown above.

THE PAINE COMPANY

2959 Carroll Avenue Chicago 12, Illinois

OTHER PRODUCTS

Spring Wing Toggle Bolts
Expansion Anchors
Sudden Depth Drills
Wood Screw Anchors
Pipe and Conduit Clamps and Straps
Hanger Iron, perforated
Expansion Shells
Star Drills
Malleable Shields
Special Hanging and Fastening Devices

WRITE FOR CATALOG

More Power For You . . .

(Continued from page 118)

the introduction of power tools.

Not so long ago, I visited a lumber yard in a rural community where the retail lumber dealer had what amounted to a monopoly on the hog-feeder business of a large trading area. Several years ago a farmer had asked the lumber dealer to build him a hog-feeder to certain specifications. The job had been done by the lumber dealer's foreman, who happened to be a handy man with tools. A few days later the farmer's neighbor appeared in the yard and asked the lumber dealer to duplicate the feeder with certain changes which he regarded as minor improvements. As time went on, the changes became more and more infrequent due to the fact that no one seemed to be able to think up any more improvements. Naturally, the end result of this evolutionary development of a hog-feeder turned out to be something rather important to the community. Farmers soon found out where they could get a feeder that would meet their needs—a feeder that would perform satisfactorily for the owner and even for the hogs themselves.

But that, of course, was not the only important factor involved in this somewhat simple example which is intended to illustrate what power equipment means to all parties concerned.

It wasn't very long before the handy-man in the lumber yard began to toss odds and ends and pieces of broken boards into what he called the "hog-feeder pile." Come a rainy day, he would then cut these pieces up into parts. Then, in his spare time he would put the precut parts together and lo and behold, there was a hog-feeder—tops in quality and in its functional performance, and exceedingly economical insofar as price was concerned.

The coming of power equipment made the construction of the hog-feeder an exceedingly simple and pleasant operation for the handy-man. The parts were made rapidly and accurately in spare time. Pieces of boards and 2x4s formerly regarded as waste were now utilized to construct a highly important piece of farm equipment.

It may seem a bit far-fetched to use a hog-feeder as a bright and shining example of what power equipment means to the light construction industry. A hog-feeder seems to present few problems so far as its construction is concerned. On the other hand, it is made up of a surprisingly large

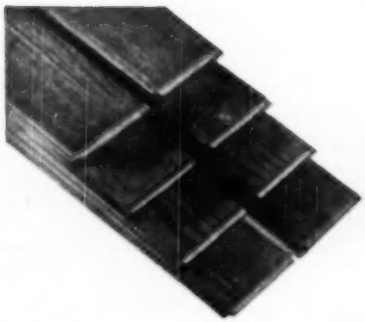
(Continued on page 192)

Bradley STRAIGHT LINE Hardwood Flooring

Gives you the edge on competition because . . .

1. Strips match perfectly from end to end.
2. No crook, no forcing, no nailed-in tension.
3. Faster laying . . . lower labor cost . . . more profit.
4. Owner enthusiasm for a lasting, superior floor.

These advantages explain the loyalty to Bradley Straight-line by a nation-wide host of contractors, floor layers and builders. If you don't belong to this group now, your first Bradley installation will put you in . . . for keeps.



Produced in Oak, Beech and Pecan, finished and unfinished. Bradley also manufactures Oak Plank Flooring, finished and unfinished.

Local Distributors Everywhere.

Bradley Lumber Company

of Arkansas

WARREN, ARKANSAS

Look what YOU get with automatic Self Lighting H.C. Little OIL HEAT

When H. C. Little oil heat is installed in a new home, the *purchaser* gets supreme comfort and the delightful convenience of exclusive H. C. Little self lighting and fully automatic operation . . . plus lower upkeep throughout the long life of the equipment.

In addition, look what YOU get...

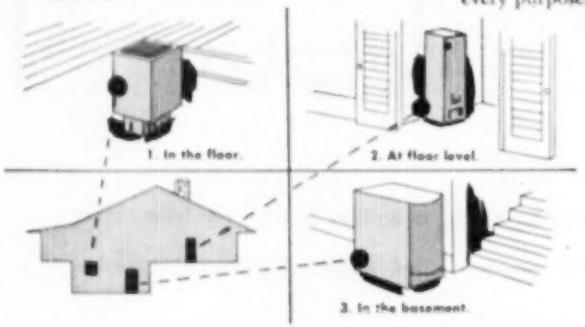
You get an essential home feature with *far more* than ordinary sales appeal.

You get the advantage of low first cost.

You get the added saving of low installation cost.

You get the benefit of obvious high quality that creates customer confidence in hidden materials.

You get a wide selection of types and models for every purpose.



1. The H. C. Little oil floor furnace, the ONLY one that is self lighting, needs no basement.

2. H. C. Little upright furnaces for first floor provide luxurious comfort and fit modern home plans to a "T".

3. Basement winter air conditioners, like all H. C. Little units, are *especially* designed for maximum comfort and efficiency in *small homes*.

Write Dept. A-5

H. C. Little Burner Company

San Rafael, California

Factory Representatives:

Baltimore, Md.
Belmont, Mass.
Boise, Idaho
Chicago, Ill.
Columbus, Ga.
Des Moines, Iowa
Detroit Lakes, Minn.
Fayetteville, N. Car.
Kansas City, Mo.
Newark, N. J.
Portland, Oregon
Prescott, Ariz.
Reno, Nevada
Salt Lake City, Utah
Seattle, Wash.
St. Louis, Mo.
St. Petersburg, Fla.

More Power For You . . .

(*Continued from page 150*)

number of parts, each and every one of which has to be cut accurately. The fact that it is now a simple matter for anyone in the lumber yard to do this work easily and to make each and every part alike is the answer to good construction at lower cost, for the very good reason that it can be achieved through the utilization of what might otherwise be a waste, or even through the use of lower grade materials. Power tools enable the workman to quickly eliminate defects and to produce parts with which economical efficient end results can be achieved.

Then, of course, the coming of power tools opened up a vast field for hobbyists. It turned many a basement into a hobby shop. It created an avocation for many a business man that took his mind off his troubles in the evening and kept him busily engaged in making things out of wood until he became so tired late in the evening that he had no trouble whatever in falling off into a sound slumber.

It is not possible today to estimate how many people *are* busily engaged in making things simply because it has become easier to do it than if it was necessary to do the cutting by hand. Furthermore, it is equally impossible to estimate the effect of this widespread interest in construction. Magazines devote page after page to the subject. Mail order houses not only use much valuable space in their catalogs to advertise power equipment for the hobbyists, but publish manuals to show what can be done with the many power tools that are available. Same way with hardware stores, and even with lumber yards.

It perhaps is an overstatement to claim that the coming of power tools has brought about the same change in construction as the internal combustion engine has brought to transportation. However, it can be stated without fear of contradiction that power tools have changed the construction industry from a hand-tool operation on the building site into something that is closely akin to the efficiencies which are achieved in factory production.

That is why I maintain steadfastly that nothing could have been more important in a day and age when new buildings are so greatly in demand and all of the structures on the face of the earth now need modernization and repair. That, of course, constitutes a whale of a big job and it will take everything that the power equipment people have to offer to satisfy the construction needs of the "land of the free and the home of the brave."

SARGENT LOCKS SELL HOMES

TEXAS architect Milton A. Ryan has used Sargent Integralocks and the 4500 line in his own house. (Hardware supplier: Dumas Hardware Company, San Antonio, Texas.)

INTEGRALOCK GIVES YOU...

beauty — round or square roses, sleek knobs to complement the beauty of any decor . . . finishes of sturdy brass, bronze, chromium or aluminum.

utility — eleven locking functions, keyhole in knob.

security — five- or six-pin cylinder lock, equipped with a shear-pin safety device in knob.

service — maintenance zero . . . sealed, all-brass and steel mechanism for generations of service . . . 50% smaller lock case for quick mortise and assembly.

INTEGRALOCK

4500 LINE

. . . a bored-in lock designed to harmonize with any interior decor, yet extremely simple to install, sturdy and practical in use.

WHEN John Q. Public and his wife inspect a house, most of the operating parts are either hidden or not in use. But not the hardware. They can see the hardware. They can feel it and use it. It's the one thing they can "try out." That's why a house equipped with Sargent Integralocks and the 4500 line is well on its way to being sold — and at a quality price. For the public knows and honors the name of Sargent. When they see that your house is equipped with Sargent locks, they automatically think "quality" and identify the rest of your house with that idea. Sargent locks are the best salesmen you can buy.

And they can be installed in one-fourth the time it takes to install ordinary locks. Yes, you pay far less for a lock that is the equal in quality to the finest in pre-war locks — and then you save on labor, too!

Write us for the name of your nearest Sargent distributor. He will be glad to supply you with further information about these two fine locks.

SARGENT
REG. U.S. PAT. OFF.

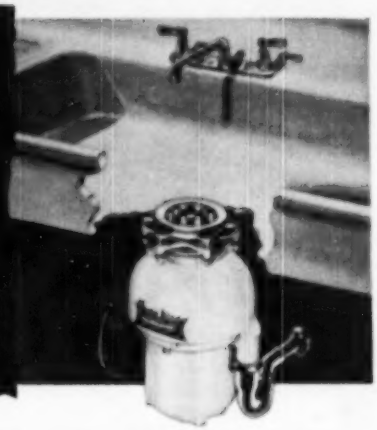
Sargent and Company

45 WATER STREET

NEW HAVEN, CONNECTICUT

TO THE BUILDER WHO PLANS TO SELL UP TO 100 HOMES IN 1950!

GET 10%* MORE



When You Include

WASTE KING *Pulverators*

America's Finest Garbage Disposer!

Wherever Builders are making sales history, you'll find their kitchens equipped with the automatic WASTE KING PULVERATOR. This one outstanding feature in the kitchen can influence and close the sale faster for YOU, as it has for hundreds of builders in recent months. Best of all—the WASTE KING PULVERATOR offers the greatest value for the least amount of money. *Upgrades the home far beyond its value, as much as ten percent. Think it over! What other quality feature could you offer at such a low cost?

1800 WASTE KINGS INSTALLED IN BIGGEST GARBAGE-FREE COMMUNITY IN U. S. A.

COMPARE! Improved shredding sleeve makes WASTE KING PULVERATOR the most efficient garbage disposer in the world! Requires less servicing than any other garbage disposer known. Let us prove it to you!

FREE! Garbage Disposer A.I.A. file folder sets. Fill out coupon now! MAIL TODAY!

Waste King PULVERATOR

© GIVEN MFG. CO., Los Angeles 1950

GIVEN MANUFACTURING CO., Dept. AB3
3855 Santa Fe Ave., Los Angeles 58, Calif.

Please send free Garbage Disposer A.I.A. File folder set.

I contemplate using _____ garbage disposers within the next six months.

Firm Name _____

Address _____

City _____ State _____

Your Name _____

Last 50 Years' Heating Progress Summarized By Industry Bureau

The last 50 years have been the most eventful in the entire evolution of the heating industry since the cave man built his first fire, according to the Plumbing and Heating Industries Bureau.

Some of the most significant innovations in the heating industry, such as radiant heating, solar heating, and heating with the latent heat of the earth have taken place in the last 10 years, the bureau pointed out in a summary of 20th century industry progress.

Nothing has contributed more to comfort and saving in time and labor than central heating, automatically-fired, the bureau said. Central heating began in 1842 when Joseph Nason, a New England engineer, brought the Perkins systems of hot water heating from England. This consisted simply of a boiler and pipe coils installed in the rooms to be heated.

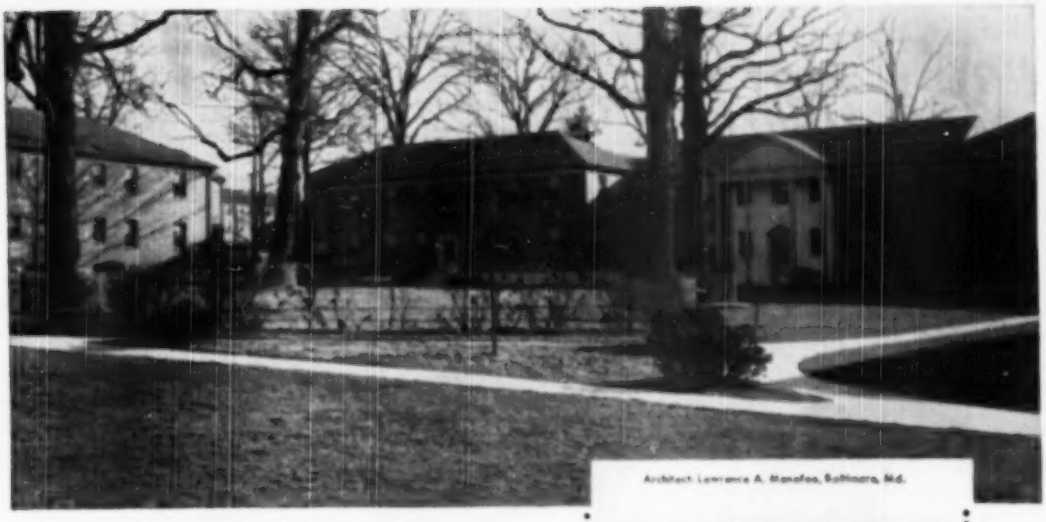
Until the turn of the century, all radiators were made of pipe. Some highly rococo types were in vogue during the period after the Civil War. The type of radiator in use today was introduced in 1905. Significant changes in radiator designs were made about 1925 and again in the early 1930's. The result of these changes in styling is the modern, slender-tube radiator with its attractive vertical lines.

Coincident with the improvements in the design of radiators, other heat-distributing units were being developed. The introduction of convectors and baseboards is the result of the striving of engineer-designers for the inconspicuous and unobtrusive in heating elements.

Panel heating is hardly more than ten years old. From a half dozen installations a decade ago, panel heating has progressed to more than 100,000 installations in every type of building.

These developments in more efficient heat distribution have been paralleled by equally significant innovations in boilers, controls, and burners. Boilers have been improved in performance and appearance. To provide the utmost economy there have been developed special gas-design boilers, oil-design boilers, and boilers made especially for use with stokers. Colorful jackets and the trend toward greater compactness in boilers have stimulated the use of the

(*Continued on page 156*)



Architect Lawrence A. Manofoo, Baltimore, Md.

Donneybrook Corporation chooses

K & M "Century"

ASBESTOS-CEMENT ROOFING SHINGLES

for appearance, long life, economical installation

When the Donneybrook Apartment Corporation chose K&M "Century" Shingles for the roofing on this modern Towson, Maryland, apartment project, there were good reasons for doing so—three good reasons.

Read what William F. Chew, President of the company says: "We recognized in the use of 'Century' No. 5 Asbestos Roofing that (it) would not only give us the desired effect, but that long life and resistance to fire are features inherent in the product."

Commenting on the economical application of K&M Asbestos Shingles, Mr. Chew says, "We experienced on this installation, which involved over 1400 squares, that the No. 5 Shingles were not only easily, but quickly applied."

The experience of the Donneybrook Corporation proves again that your strongest sales points for K&M Shingles are *attractive appearance, long life,* and *economy.* Add to these the recognized freedom from maintenance, and you have a powerful sales story for any owner.

Tell your customers, too, about the "extras" in K&M "Century" Shingles. K&M Shingles resist weather, rust, rot, rodents, and fire. Their eye-pleasing colors—White, Black, Spanish Red, Surf Green, and Graytone—are *built in.*

With sales points like these, you can build your business—increase your profits—with K&M "Century" Asbestos-Cement Shingles. Ask your K&M Dealer for complete details, or write us direct.

K&M "Century"

ASBESTOS No. 5 SHINGLES USED IN ROOFING THE DONNEYBROOK APARTMENTS

American method appearance; random width, thatched butt construction. Each unit covers over 1 sq. ft. of exposed area. Application cost is low—only 90 shingles per square; 2 nails per shingle; self-aligning. Suitable for reroofing—apply directly over old wood shingles or composition roofs. Give complete weather protection on roof pitches as low as a 4" rise per foot.

KEASBEY & MATTISON

COMPANY • AMBLER • PENNSYLVANIA

Original manufacturers of Asbestos-Cement Shingles in this country

Start that sale at the front door!

EDWARDS non-electric DOOR CHIME a big "little extra" in today's market!

Why take chances with the all-important first impression that makes or breaks so many sales?

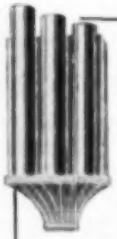
Now, for little more than the cost of ordinary bells and buzzers, an EDWARDS Door Knocker Chime can *start* your sale right . . . yes, right at the front door!

"FAIRFAX" (shown above) . . . classically styled, in gleaming brass with mirror on inside. Absolute tone purity guaranteed by exclusive Sonoscope-test.

No fuss, no wiring. It's on in a jiffy . . . ready to sound that first sweet, all-important "welcome" note to every prospect!

NEW LOW PRICES. See your electrical contractor or write:

EDWARDS COMPANY, INC.
NORWALK, CONN.
In Canada: Edwards of Canada, Ltd.



Chordette
ELECTRIC DOOR CHIME

CONTINUOUS MELODIOUS CHORD, as long as entrance button is pressed, is feature of this famous Edwards Door Chime, now available at lower-than-ever prices.

Sequence of two symphonic notes for rear-door signal. Sonoscope-tested for tone purity.

EDWARDS
Door Chimes

Revise Standard for Fiber Insulating Board

Printed copies of the fourth edition of the Commercial Standard for Structural Fiber Insulating Board, CS42-49, are now available, according to an announcement of the Commodity Standards Division of the National Bureau of Standards.

The revision was initiated by the Insulating Board Institute, approved by the standing committee, and accepted by the industry. It provides for a new class of interior boards (flame-resistant finished surface) and also includes additional requirements of tensile strength perpendicular to surface, and methods of test.

This standard is offered as a basis for common understanding in the insulating board industry and establishes criteria of insulating board value and other physical requirements. In addition, it presents a basis on which performance guarantees may be made to the manufacturer.

Copies of the revised standard are for sale by the Superintendent of Documents, Government Printing Office, Washington 25, D.C., for 10 cents each. A discount of 25 per cent will be allowed on orders of 100 or more copies.

Heating Progress . . .

(Continued from page 154)

basement for recreation and hobbies.

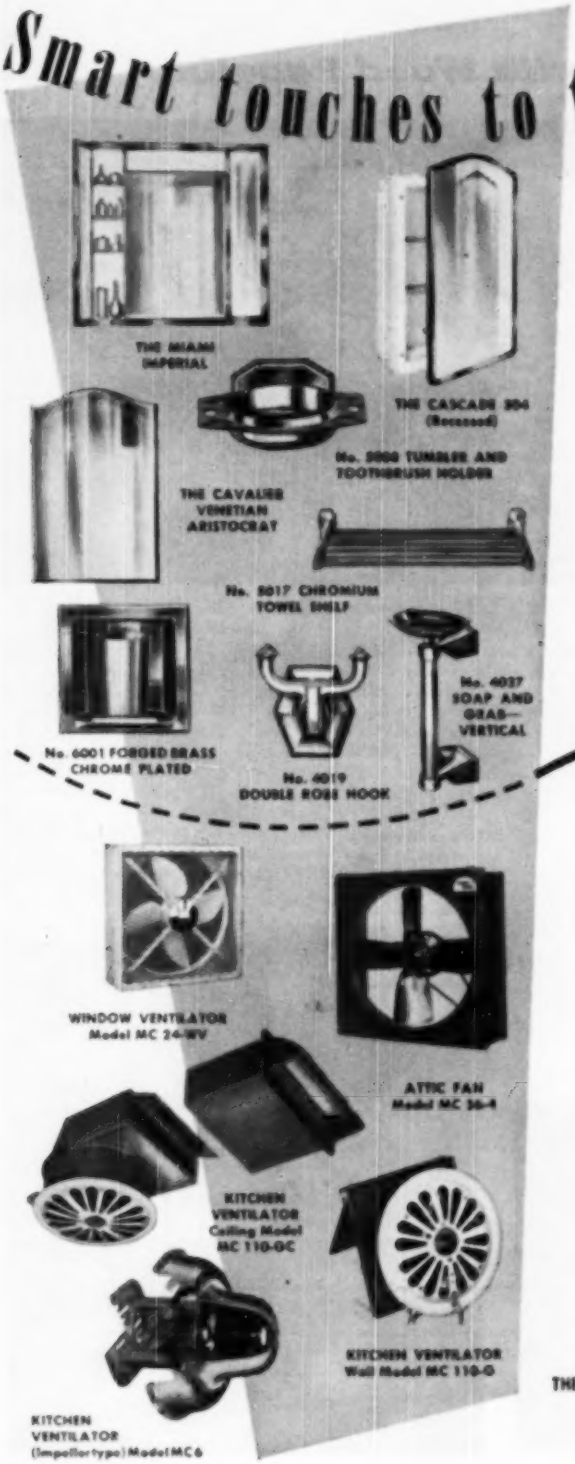
During the first 25 years of the century, all hot water heating systems depended upon gravity for the distribution of hot water. For this reason it was necessary to have the boiler in a basement or other location below the level of the radiators.

About twenty-five years ago the principle of mechanical circulation of water was introduced. Impelled by a small but powerful electric pump, the hot water can now be directed, positively and quickly, to any place desired from a boiler located in any place, even the attic.

While the era of automatic heating began 30 years ago, its greatest impetus has been attained in the last twenty years. Oil burners, gas burners, and stokers have been developed to meet the demand for effortless and uniform heating.

From the crude thermostats of 25 years ago, controls have developed into the highly sensitive and precise instruments now available. Styled for beauty as well as accuracy, modern controls provide the utmost in economy. Among some of the most recent innovations are the indoor-outdoor type of control, the heat-anticipating control, and the electronic control.

Smart touches to touch off Sales



MIAMI Carey

Products for Better Living

MAKE BATHROOMS "SING"!

Equip them with smartly modern Miami-Carey cabinets, mirrors and matching accessories. Miami-Carey makes four top-quality lines to meet your customers' specific design and budget requirements . . . all designed for easy installation . . . and featuring new beauty and construction advantages offered only by Miami-Carey. Competitive pricing and liberal discounts assure your profits!

VENTILATION BY MIAMI-CAREY

Adds sales appeal and value to homes . . . keeps owners happy the year 'round. The Miami-Carey line is complete—includes models for attic, window and kitchen installation . . . each with certified air delivery ratings and a full complement of engineered accessories for economical installation and top performance.

TOUCH OFF YOUR SALES!

Let Miami-Carey's *two* lines help you. Ask your Miami-Carey dealer or write

MIAMI Carey

MIAMI CABINET DIVISION
THE PHILIP CAREY MFG. CO.
MIDDLETOWN, OHIO

Low Upkeep Costs with Wood Paneling

Hardwood panels with high insulation qualities cover all interior walls of northern Michigan home

ALL interior walls of this home on Torch Lake, Mich., are finished in hardwood paneling. Originally conceived as a cabin over a planned boathouse, the home, during its evolution, superseded the boathouse entirely to become a year-round residence.

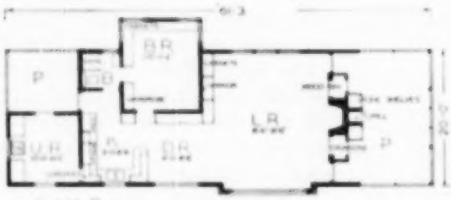
Virgil J. Leech, owner and designer of the home, is president of the General Hardwood Company, Detroit, Mich. Leech stated that the cost of paneling was only slightly more than the cost of conventional wall finishes would have been. This difference, he believes, is compensated for by the low upkeep costs of the wood that takes mutilation and banging and requires only shellac and wax to repair. This was an important consideration in planning a "summer home" that will serve as a year-round recreation center for the Leech family and their friends.

Three hardwoods—maple, oak, and cypress—were used on the interior walls and in the cabinets. The living room is finished in knotty (or antique) oak in solid ¾-inch panels which have a pattern run on their edges. Nailing strips on 2 by 4 inch studs help secure the panels. Although ¾-inch Celotex and 30-pound building felt are used as sheathing on the outside walls, finished with 10-inch beveled fir siding, the interior wood paneling and air space have a high insulation factor themselves. To match the interior woodwork, a ⅛-inch white oak veneer was glued on the standard living room doors.

The bedroom is paneled in ¾-inch hard maple, cut in an edge pattern. White maple cabinets installed in the bedroom were built in the Detroit factory of the owner and reassembled at the house. Twin beds in the room, carrying out the maple motif, are of bird's-eye maple. Ceiling cabinets are build above all walls in the bedroom.

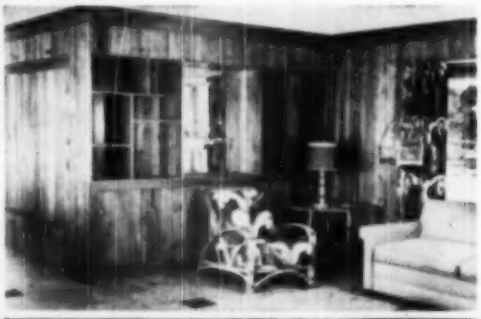
Oak was used to panel the hallway

(Continued on page 198)

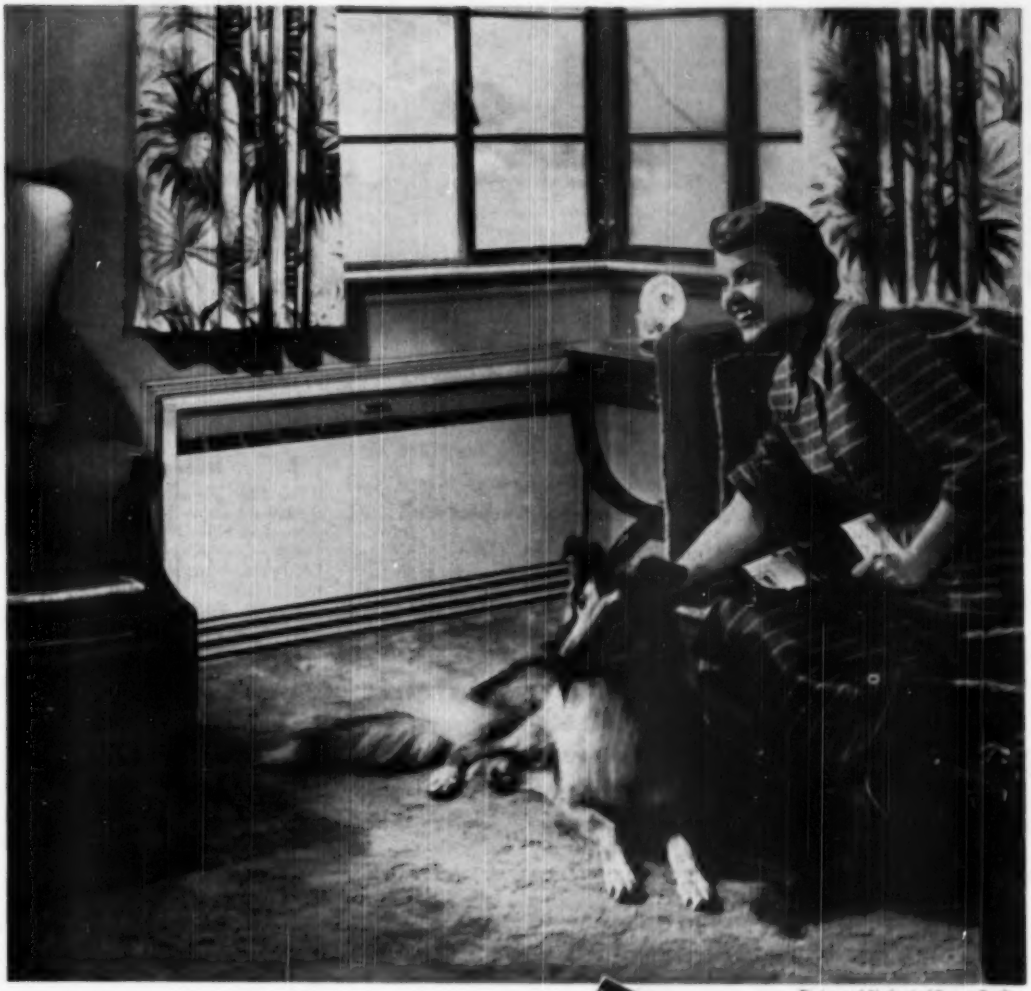


FLOOR PLAN

BELOW, counterclockwise, views of dining and kitchen area, of house from lake, and of end of living room



Nothing heats better than Modine Convector Radiation . . . NOTHING LOOKS MORE BEAUTIFUL IN A BEAUTIFUL ROOM



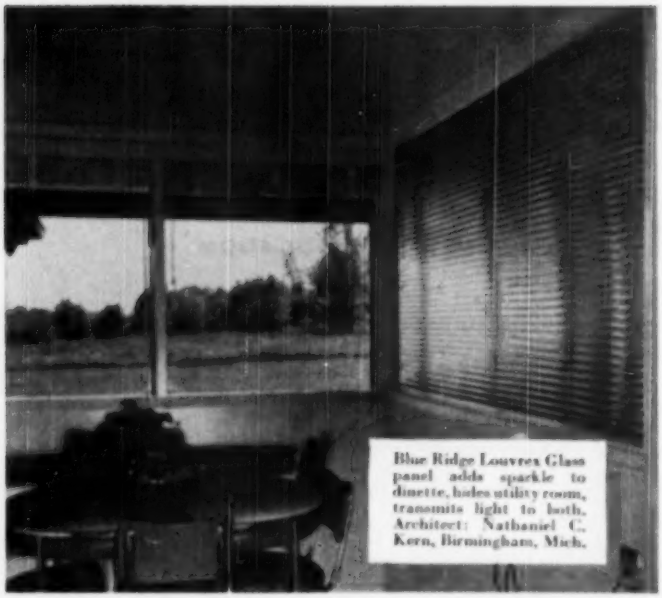
Design and Mechanical Patents Pending

To find out why the new Modine Convector is the *better* way to heat apartments, homes, schools, offices or hospitals, call your Modine Representative. He's listed in the "Where-to-Buy-it" section of your phone book. Ask to see a sample, or write direct. **Modine Mfg. Co., 150 1** Dekoven Avenue, Racine, Wisconsin.

Send for New Modine Convector Catalog Today!

Modine
CONVECTORS

6-106T



Blue Ridge Louvrex Glass panel adds sparkle to dinette, hides utility room, transmits light to both. Architect: Nathaniel C. Kern, Birmingham, Mich.

The *Thrifty Way* to Build-in Beauty

You decorate as you build, when you separate rooms with Blue Ridge *Patterned Glass*. Equally beautiful on both surfaces, it provides a sparkling finish in two rooms . . . which means less plastering, painting or papering.

With walls or partitions of Blue Ridge *Patterned Glass*, you give your homes more "sell". They're brighter, more appealing . . . because light flows freely from one room to the next. Over 20 view-obscuring patterns give you wide choice in creating individuality.

To meet specialized needs, Blue Ridge Glass may be *Satinol*®-finished for greater privacy and *Securitized* for greater strength. Ask your L-O-F Glass Distributor for details, or write us.

"New Adventures in Decorating"

This Idea book shows actual installations of Blue Ridge *Patterned Glass* in large and small homes. Write for your copy. Blue Ridge Sales Division, Libbey-Owens-Ford Glass Company, 8355 Nicholas Building, Toledo 3, Ohio.

BLUE RIDGE

Patterned GLASS

Dealer Conventions . .

(*Continued from page 72*)

lations," "Store and Yard Modernization," and "Business Management, Forms and Methods." Speakers were headed by Senator Joseph R. McCarthy of Wisconsin, whose subject was "Housing Legislation in 1949."

CHARLES H. KEMPER

Charles H. Kemper of Troy, Mo., was elected president of the group. He succeeds Paul M. Leird of Little Rock, Ark. First, second and third vice presidents are C. D. Burkholder, McPherson, Kans.; Henry H. Jones, Little Rock, Ark.; and Fred S. Stephenson, Chickasha, Okla. Other officers are: C. W. Baker, Kansas City, Mo., treasurer; Frank E. Tyler, Kansas City, Mo., general counsel; and Allan T. Flint, Kansas City, Mo., secretary-manager.

Nebraska

The 59th annual convention of the Nebraska Lumber Merchants Association was held Feb. 22-24 at the city auditorium, Omaha, with a near-record 1,600 persons registering. There were 104 exhibits.

Paul Ely of North Platte was elected president and Emil Coufal, Schuyler, vice president. Phil Runion, Lincoln, is secretary.

Speakers included H. R. Marsh, E. I. Du Pont de Nemours and Co., Chicago; O. C. Lance, secretary-manager, National Woodwork Manufacturers Association; Dr. Ruth Alexander, Chicago columnist; and C. B. Sweet, NRLDA president.

Intermountain

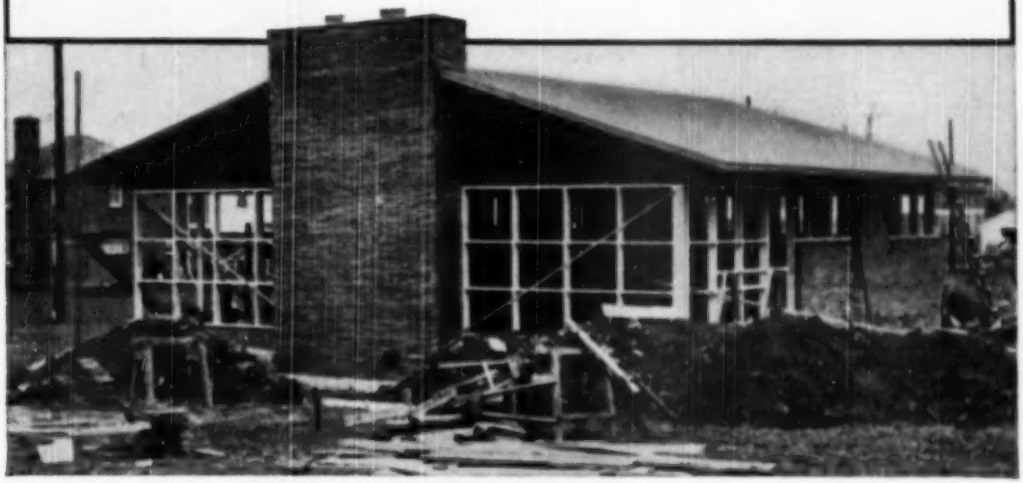
W. Arthur Jones of Cedar City, Utah, was elected president of the Intermountain Lumber Dealers Association at the 7th annual convention in Salt Lake City March 2-4. Registration at the meeting reached 850 and there were 53 exhibits.

The two new Association vice presidents are C. G. Morris, Rock Springs, Wyo., and Charles Bohrer, Pocatello, Idaho. Melbourne Romney of Salt Lake City is secretary-treasurer.

Directors are M. L. Horsley, Soda

(*Continued on page 162*)

BUILDER CUTS COSTS $263 with *Thermopane* WINDOW WALL



Construction time saved. Vertical 2 x 6's double as structural members and as side frames for the *Thermopane*. Horizontal 2 x 6's serve as top and bottom frame members, the fixed *Thermopane* being stopped into place. Ventilating sections are simple, top-hinged each also glazed with *Thermopane*.

A house with extra sales appeal . . . built faster . . . for less money. That's what builder N. P. Ninneman of Harrisburg, Pa., reports on his unique method of framing *Thermopane*® insulating glass in window walls.

Mr. Ninneman figures his *Thermopane* window wall not only costs less than conventional wall construction, but also saves 20 or more days in construction time.

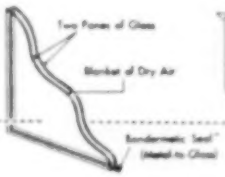
These benefits are made possible by using structural members of the house as frames to hold standard size *Thermopane* units. This window wall construction goes up so quickly that the house is completely closed in and glazed by the end of the fifth day, so inside work can proceed.

By using window walls, Mr. Ninneman is able to provide a spacious-looking home on a small floor plan. By glazing them with *Thermopane*, Mr. Ninneman assures buyers of comfort they wouldn't have with single-glazed window walls.

Case after case is being reported of builders who are adding the sales appeal of *Thermopane* window walls at little or no extra cost. Have you recently measured its possibilities for your houses?

®

FOR BETTER VISION SPECIFY THERMOPANE MADE WITH POLISHED PLATE GLASS

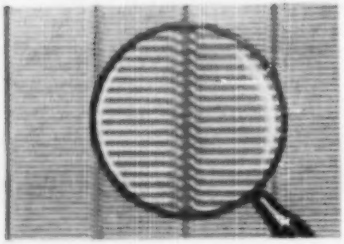


Thermopane

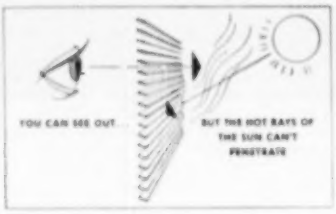
MADE ONLY BY LIBBEY-OWENS-FORD GLASS COMPANY
2555 Nicholas Building, Toledo 3, Ohio

Quick!

TIME TO CASH IN ON SHADE SCREENING!



It's the peak of the season now—and if you act fast you can still beat competition to the punch with Kaiser Aluminum Shade Screening! It's a fast-selling cooling device with the *highest screening mark-up anywhere!*



But it isn't just screening. Kaiser Aluminum *Shade* Screening keeps hottest rooms as much as 15° cooler—by means of thin louvers which block the sun but not the view.

It does the work of Venetian blinds *plus* awnings *plus* insect screening at one-tenth the cost of all three!

Available in regular or tension frames from sash and screen manufacturers, and in 50-foot rolls from jobbers. We suply ad mats, sales tools, merchandising devices. Get in touch with us fast for AIA file and name of nearest manufacturer or jobber.

If you're a jobber, contact us now for profitable territories still open!

Sales offices and distributors in principal cities.

Kaiser Aluminum

SHADE SCREENING

Produced by Kaiser Aluminum & Chemical Corp. Sold by Kaiser Aluminum & Chemical Sales, Inc., Oakland 12, Calif.

Dealer Conventions . . .

(*Continued from page 160*)

Springs, Idaho; W. B. Jex, Spanish Fork, Utah; H. B. Richards, Salt Lake City; S. C. Robinson, Salt Lake City; E. D. McCaslin, Burley, Idaho; Vance Petersen, Gunnison, Utah; A. E. Anderson, Jr., Salt Lake City; H. B. Wheelwright, Ogden, Utah; and W. W. Weigle, Jerome, Idaho. C. W. Gamble, Boise, Idaho, is the dealer-director on the national board.

Western

The 47th annual convention and building materials exhibit of the Western Retail Lumbermens Association was held at the Multnomah Hotel, Portland, Ore., in late January, with 860 persons in attendance. There were 57 exhibitors.

RALPH HOWARD

Ralph T. Howard of Klamath Falls, Ore., was named president for the 1950 term, succeeding Kent Rubow, Boise, Idaho. Newly-elected vice presidents are Ira E. Snyder, Enterprise, Ore., and Morris Tarte, Bellingham, Wash. The following vice presidents were re-elected: W. L. Johnson, Boise, Idaho; Harold Uglem, Lewiston, Idaho; F. G. Mauser, The Dalles, Ore.; H. F. McDaniel, Eugene, Ore.; C. A. King, Bremerton, Wash.; and R. E. Wert, Spokane, Wash.

United States Senator Wayne Morse of Oregon spoke on "Economic Problems Ahead." Prominent industry speakers included NRLDA President C. B. Sweet, R. A. Hill, advertising sales director of the National Paint, Varnish and Lacquer Association; and Gates Ferguson, general sales manager of the Celotex Corp.

Indiana

The 66th annual convention of the Indiana Lumber and Builders' Supply Association, held Feb. 28 to March 2 at the Murat Temple, Indianapolis, was one of the group's most successful, R. W. Slagle, secretary-treasurer reported. Attendance, despite bad weather, reached approximately 3,000; and the number of exhibitors was 150.

Elected 1950 president at the meeting

(*Continued on page 164*)

Hurry!

RE-SIDING PROFITS POURING IN NOW!

You can get your share of big profits with Kaiser Aluminum Siding *this* season—if you act now!

It's a new kind of siding that has permanent beauty, low first-cost, no upkeep costs. Result: Quick sales, high profits for you!

It's easy to work with. Goes on fast. Nailed on one edge only. Curved surface gives extra strength and beauty, assures watertight joints. Has permanent baked-on paint finish.

Made of tough, high grade aluminum. No buckles, wrinkles or "oil cans." Can't rot, rust or warp. Can't be damaged by termites. Resists fire.

We'll supply you with the kind of sales aids and merchandising tools that get *results!* Act at once, though. It's peak season—and your competition can get the edge on you. Write *today* for descriptive booklet and name of nearest jobber.

If you're a jobber: Some profitable territories are open. Contact us now!

Sales offices and distributors in principal cities.

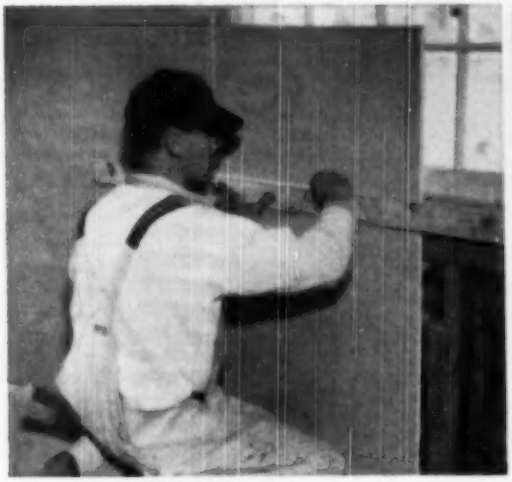
Kaiser Aluminum

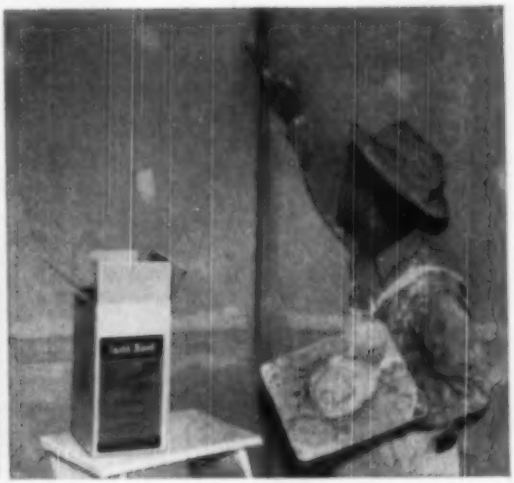
SIDING

Produced by Kaiser Aluminum & Chemical Corp. Sold by Kaiser Aluminum & Chemical Sales, Inc., Oakland 12, Calif.

How did Kelly Corp. cut construction costs

in their new 120 unit "Hiramar" development?





These pictures tell the story! Gold Bond Gypsum Wallboard and Perforated Tape Joint System were used for the interior walls of 60 duplex Cape Cod houses in Hyannis, Mass. These companion Gold Bond products produce walls and ceilings of long-lasting beauty and save weeks in construction time.

A LOT of careful planning went into beautiful "Hiramar" rental development in Hyannis, Mass. Built by the Kelly Corporation, Arlington, Mass., there are a total of 120 living units—one, two and three bedroom apartments. The development is the last word in modern land planning with beautiful landscaping, gently curving streets and walks, five play areas and 100% off-the-street parking.

Kelly Corp. made a wise decision in building this Hiramar job. They standardized on Gold Bond products: Gold Bond Rock Wool Insulation, Gypsum Sheathing, Gypsum Wallboard and Perforated Tape Joint System and Gold Bond Sunflex Paint. Result: Responsibility for performance of all these materials is centered in one reliable manufacturer—National Gypsum Company.

Whether you're building 1 house or 100, low-cost or deluxe, let your local Gold Bond Lumber and Building Supply Dealer supply the job from start to finish. That way you get quality building products made to work together for a better, faster finished job.

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK

You'll build or remodel better with
Gold Bond

Fireproof Wallboards, decorative Insulation Boards, Lath, Plaster, Lime, Sheathing, Wall Paint, Rock Wool Insulation, Metal Lath and Sound Control Products.

BUILD AT LOWER PRICES

BE MORE COMPETITIVE

MAKE YOUR OWN

- Sash—double hung and casement
- Trim — including base, shoe, crown and cove mold, window stop
- Specials — like matching old style millwork
- Raised panel doors
- Window blinds
- Storm windows and screens
- Interior panelling
- Newel stair treads
- Lipped cupboard doors
- Special shaped windows
- Drawer fronts —all made quickly and at little cost with a

Boice-Crane SHAPER

(low investment—around $300) plus a variety of professional type

"TRU-FORM" SHAPER CUTTERS

Keep your men busy on off days.

Free yourself from high mill charges. Save big money. Save hours spent in trips to the mill. Avoid long waits for special made sash and millwork. Investigate now!

Boice-Crane intermediate capacity power tools are of just the right size for setting up a mill in your own shop. A 10-inch saw—6-inch jointer combination, a drill press and mortiser and a 14-inch band saw can be had for less than $700. They'll pay for themselves in no time and go on to make money for you for years to come.

BOICE-CRANE COMPANY

904 Central Avenue • Toledo 6, Ohio

Please send FREE LITERATURE on Boice-Crane ( ) Shaper ( ) New 44-page catalog on complete line

( ) Tru-Form Relief Safety Cutters for Shapers

NAME

FIRM

STREET

CITY & STATE

Dealer Conventions . . .

(*Continued from page 162*)

was W. I. Brunton, W. L. Hubbard Lumber Co., Scottsburg, vice president in 1949. John C. McCormick of the McCormick Lumber Co., Lawrence, was named vice president.

W. I. BRUNTON

The entertainment features, including the annual banquet and dance and a two-hour theater party, proved especially popular this year.

Among the special speakers were Roy Wenzlick, St. Louis business analyst, Radio Commentator Harrison Wood and H. R. "Cotton" Northup, NRLDA executive vice president.

Michigan

Registration at the annual convention of the Michigan Retail Lumber Dealers Association Feb. 7-9 at Grand Rapids neared the 2,000 mark. Ninety-one exhibitors occupied 106 booths. The meeting, the Michigan group's sixty-first annual, was held at the Pantlind Hotel and the civic auditorium.

Senator Homer Ferguson of Michigan addressed the convention on "Domestic and World Conditions." Other speakers included H. R. Northrup, NRLDA executive vice president; Philip Creden, advertising manager, Edward Hines Lumber Co., Chicago; and Col. Robert M. Brooks, Jr., Roy Wenzlick and Co., St. Louis.

Lester Essenburg, Holland, was elected president of the Association. He had been acting as president during the unexpired term of the late Axel Becker of Monroe. Others on the officer roster are: vice presidents, Walter Peacock, Port Huron, and T. B. Peterson, Grayling; secretary, Hunter M. Gaines, Lansing; assistant secretary, Donald J. Moe, Lansing; treasurer, Norman B. Cove, Lansing; and counsel, Donald P. Schnur, Detroit.

Mountain States

Approximately 1,000 persons attended the Mountain States Lumber Dealers Association convention at the Shirley Savoy Hotel, Denver, Feb. 8-10. The number of exhibitors was 64.

Elected president of the Mountain group was Carl A. Wangberg of Colo-

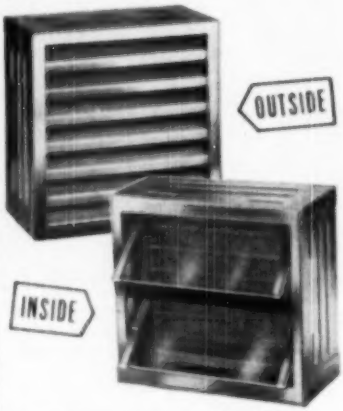
(*Continued on page 166*)

2 *New* Single Unit GLASS BLOCK VENTILATORS

ECONOMY WEATHER-BLOC with stainless steel louvers—permanent on the outside and adjustable on the inside—½ savings in cost. Available in 6-inch and 8-inch sizes.

UTILITY WEATHER-BLOC has permanent stainless steel louvers on the outside and adjustable glass louvers on the inside. Available in 6, 8 and 12-inch sizes.

Economy and Utility Weather-Bloc are well adapted for basements and other low level locations where glass louvers might be subject to breakage.



STANDARD WEATHER-BLOC with glass louvers on the inside and the outside. Blends in perfectly with glass block panels. Available in 6, 8 and 12-inch sizes.

WEATHER-BLOC takes no longer to install than a single glass block—simply set in place of a glass block. Used in HOMES, STORES, OFFICES and INDUSTRY. WEATHER-BLOC offers controlled ventilation . . . aluminum screen inside retards rain, snow, dirt and insects . . . no sacrifice to beauty or privacy . . . permanent stainless steel body.

In Old or Newly Completed Glass Block Panels where Ventilation is Desired, Break Out Single Glass Block and Replace with Weather-Bloc.

Available Through Your Glass Block Dealer or Jobber
Also Nationally Distributed by Winco Ventilator Co., Inc.
933 Bittner Street, St. Louis, Missouri

WEATHER-BLOC

TRADE MARK PATENT PENDING

AIR RECTIFIERS, Inc.
3734 Southport Avenue, Chicago 13, Illinois
Please send me complete information and prices.

Name .....
Address .....
City ..... Zone .... State .....

HERE ARE THE 25 MOST POPULAR modular size

WOOD WINDOWS THAT SAVE BUILDING TIME AND COSTS!

Less cutting and trimming on the job . . . less waste . . . lower building cost! These are the reasons why it pays to insist on modular-size windows, sash and frames!

The 25 most popular sizes of 5 of the most popular designs shown on this page are manufactured on the 4-inch "module" or unit of measurement. All are available promptly. See your lumber dealer.

OPENING SIZES	GLASS SIZES—1⅜" CHECK RAIL WINDOWS				
(Note: Windows are made ¼" narrower and ⅛" shorter than window opening sizes shown below)	Two Light	Four Light High	Top Three Light Wide	Top Six Light	Twelve Light
3-0x3-2	30x16	30x 7¼	6½x16	6½x 8	6½x 8
3-0x3-6	30x18	30x 8¼	6½x18	6½x 9	6½x 9
3-0x3-10	30x30	30x 9¼	6½x30	6½x10	6½x10
3-0x4-6	30x24	30x11¼	6½x24	6½x12	6½x12
3-0x5-2	30x28	30x13¼	6½x28	6½x14	6½x14
3-4x3-2	34x16	34x 7¼	7½x16	7½x 8	8 x 8
3-4x3-6	34x18	34x 8¼	7½x18	7½x 9	8 x 9
3-4x3-10	34x30	34x 9¼	7½x30	7½x10	8 x10
3-4x4-2	34x22	34x10¼	7½x22	7½x11	8 x11
3-4x4-6	34x24	34x11¼	7½x24	7½x12	8 x12
3-4x4-10	34x36	34x12¼	7½x36	7½x13	8 x13
3-4x5-2	34x28	34x13¼	7½x28	7½x14	8 x14
3-8x3-2	38x16	38x 7¼	9½x16	9½x 8	
3-8x3-6	38x18	38x 8¼	9½x18	9½x 9	
3-8x3-10	38x30	38x 9¼	9½x30	9½x10	9½x10
3-8x4-2	38x22	38x10¼	9½x22	9½x11	
3-8x4-6	38x24	38x11¼	9½x24	9½x12	9½x12
3-8x4-10	38x36	38x12¼	9½x36	9½x13	9½x13
3-8x5-2	38x28	38x13¼	9½x28	9½x14	9½x14
			Top Four Light Wide	Top Eight Light Four Wide	Sixteen Light
3-0x3-2	33x16	33x 7¼	7½x16	7½x 8	7½x 8
3-0x3-6	33x18	33x 8¼	7½x18	7½x 9	7½x 9
3-0x3-10	33x30	33x 9¼	7½x30	7½x10	7½x10
3-0x4-6	33x24	33x11¼	7½x24	7½x12	7½x12
3-4x3-10	36x30	36x 9¼	8½x30	8½x10	8½x 8
3-4x4-6	36x24	36x11¼	8½x24	8½x12	8½x12

For additional data, see our catalog in Sweet's Builders' File

POPULAR DESIGNS OF MODULAR-SIZE WOOD WINDOWS

Made of ponderosa pine, these modular-size windows have the natural insulating advantages that wood so handsomely provides. They hold paint or other finishes lastingly . . . discourage condensation. They are available toxic preservative treated at the factory for extra resistance where staining, decay, insect attack or humidity are factors. Ask your dealer for them.

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION

332 SOUTH MICHIGAN AVENUE CHICAGO 4, ILLINOIS

This seal of approval identifies woodwork products which meet NWMA minimum standards of toxic preservative treatment.

LICENSE NO. 000 TOXIC—PRESERVATION APPROVED NATL. WOODWORK MFRS. ASSN.

National Woodwork Manufacturers Assn.
332 South Michigan Avenue
Chicago 4, Illinois

Gentlemen: I want to know more about modular design woodwork. Please send me your folder, "New Savings for Builders."

Name .....

Address .....

City ..... Zone ..... State .....

8-FT. LENGTHS

MORE DOLLARS AND SENSE!

More Facts that Prove Bermico Cuts Building Costs

Bermico's convenient 8-foot lengths store more safely with far less breakage . . . are easier to handle on the truck or job. Bermico weighs only ⅓ as much as other types of pipe. A cinch to lay, too. No joining compound needed. A few hammer blows and Bermico joints are tight . . . and stay tight even when the ground shifts underneath!

WEIGHS ⅔ LESS

Small wonder builders find that Bermico saves money, time, effort all along the line. Bermico is a hit with customers, too. It's rootproof, leakproof, watertight . . . unaffected by temperature extremes . . . Bermico assures a smooth, dependable high capacity water flow.

That's why, today, millions of feet of Bermico are in use in house-to-sewer connections, septic tank disposal and drainage systems.

ROOT-PROOF JOINTS

Bermico can cut your costs for time and labor and increase your profit as well. Drop us a line and get the whole story of why it pays to insist on Bermico Sewer Pipe.

Dept. A-15, Brown Co., 500 Fifth Ave., N.Y.

BERMICO®

SEWER PIPE

A PRODUCT OF BROWN COMPANY

Dealer Conventions . . .

(*Continued from page 164*)

rado Springs. J. F. Scott, Denver, is vice president and J. V. Smith, Denver, secretary-treasurer.

CARL A. WANGBERG

Directors are R. B. Allen, Portales, N.M.; H. H. Hast, Denver; G. G. Morris, Rock Springs, Wyo.; B. E. Payne, Carlsbad, N.M.; C. C. Phillippe, Basin, Wyo.; T. H. Walker, Casper, Wyo.; H. I. Williams, Durango, Colo.; C. A. Wangberg and J. F. Scott.

Bell Prime Mover Division Sold to Iowa Company

The Bell Aircraft Corp. has sold its Prime Mover Division to a newly-formed company in Muscatine, Iowa. The purchaser is the Prime Mover Co., a subsidiary of the Home-O-Nize Co., manufacturer of home appliances and machinery. Head of both Home-O-Nize and the new subsidiary is C. M. Stanley, well-known engineer and president of the Iowa Engineering Society.

The Prime Mover, a materials handling machine often referred to as a motorized wheelbarrow, has been in production in Bell's Buffalo plant since late 1947 and is being sold, the company said, "In order that we can devote all of our activity and attention to acceleration of high military schedules delayed by last year's 19-week strike."

Two Bell Corp. officials have been elected to the board of directors of the new Prime Mover Co.— Harvey Gaylord, treasurer, and George Olmsted, director, who is also an official of the Hawkeye Casualty Co. of Des Moines, Iowa.

Under the terms of the contract which transfers the Prime Mover business to the new firm, Bell will continue as an active participant for a period of years. Terms of sale stipulate percentage payments to Bell on prime Mover volume by the new company for more than 10 years.

FABRICO*

ALL-ALUMINUM SCREENS

FOR EASY SALES AND GREATER PROFITS

FOR WOOD WINDOWS:

No ladder needed—Reinforced by cross brace, screens can be hung or removed from inside the house. Very light weight. Easily handled by Mrs. Housewife.

FOR METAL WINDOWS:

Attached with WING CLIPS (at no extra cost). After installation, no screwdriver needed to change or remove screen for window washing. Flips off instantly. No loose screws to get lost.

Because they are light in weight, they are easy to Handle—Demonstrate—Deliver. (Many customers will take them home in their own cars.)

Made of rust-free aluminum and packaged in a handy carton. *Do not deteriorate while in the warehouse.* Take up minimum stock-room space, because carton of 10 screens is under 5" thick.

Manufactured by modern methods—assembled on a production line—by people with a decade of experience in aluminum screens.

Your Guarantee for *uniform top quality and freedom from consumer complaints.*

All standard sizes for wood and metal windows available from stock—shortest delivery time on special orders. You can take *all* your screen problems to Fabrico.

DISTRIBUTORS INVITED

For samples, prices and information on available franchises, write Department E

Screens & Fabricated Metals Corp.

NORTH BERGEN • NEW JERSEY

IN ANY QUANTITY — IN ONE QUALITY — THE BEST!

Why consumers go for

FABRICO

ALL-ALUMINUM SCREENS

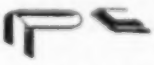
* REGISTER APPLIED FOR

Light Weight. Screens are easily handled—quickly installed.

Rolled Tubular Section. 18 x 14 mesh Alclad aluminum screening combines corrosion-resistance with maximum strength. Held at maximum tautness by specially-designed aluminum spline. Precision engineered for maximum strength and rigidity.

Rugged Strength.
Will Not Red-Rust.
Need No Painting. No upkeep.

Corner Locks give wedge-fit without corrosive effect or discoloration.

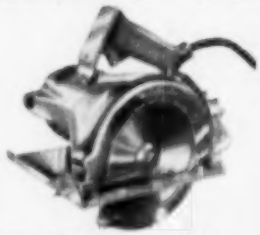


No Stains, no discoloration of walls, woodwork, draperies or blinds.

Hardware Included—complete with rust-resisting hanging or attaching devices. Can be used also to hang storm windows. WING CLIP for casement windows.

Protective—A glowing cigarette or windswept burning leaves will not harm the screen.

BRADFORD
ELECTRIC SAWS



Model 160 — 6" Saw

Straight cut: 2" max.; 9/16" min.
Bevel cut at 45°: 1 1/16" max.; 1/2" min.

Model 180 — 8" Saw

Straight cut: 2 29/32" max.; 1" min.
Bevel cut at 45°: 2 1/16" max.

These new 6" and 8" Bradford Portable Electric Saws are ruggedly constructed and fully powered to take on the *toughest* sawing jobs! They're better designed — inside and out — for easier handling, smoother sawing, more accurate work. You can *feel* the difference in the Bradford design!

And Bradford Saws are built to last. Ball bearings with permanent lubrication are used throughout. Gears are helical cut to give maximum driving power. A powerful 110 volt AC/DC motor drives the blade with quiet, cool-running efficiency.

Own a new Bradford Portable Electric Saw — they're the choice of craftsmen everywhere. See your Bradford dealer for a demonstration. Write for bulletins giving specifications and prices.

THE BRADFORD MACHINE TOOL CO.

654 Evans Street Cincinnati, Ohio
Precision since 1840

R. E. Saberson Joins Reserve Supply Co. In Expansion Program

Reserve Supply Co., St. Paul, Minn. has completed plans for expanding its functions with the addition of a merchandising department, according to a recent announcement by J. R. Randall, president.

R. E. Saberson, who has been in charge of the trade promotion department of Weyerhaeuser Sales Co. for

R. E. SABERSON

several years, has joined the Reserve Supply organization in a full-time capacity and took charge of the new department April 1.

Johnnie Giles, a member of the executive staff since 1947, will devote increased time to administrative duties under the expanded program.

In commenting on the expansion plans of the company, Randall stated that "It will be the policy of our merchandising department to integrate closely the promotional activities of our suppliers with the sales program of our dealers and to make maximum use of the unusual opportunities for doing so which exists in our organization.

"Mr. Saberson has been familiar with the objectives of the Reserve from the beginning and is equally well-acquainted with all phases of the distribution problems of our suppliers and members. We feel certain that a carefully coordinated merchandising program of this kind can do a great deal to stimulate the movement of building materials from the producer, through the lumber yard, to the ultimate consumer."

1950 Home Improvements May Total $6 Billion

Expenditures for modernization, repair, and remodeling of homes in 1950 may come to as much as $6 billion, or not far below the amount expected to be spent for construction of new homes, according to an estimate by James M. Ashley, president of the Producers' Council.

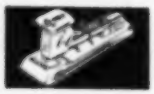
STAPLE—*to save time speed up production*

T-32 Gun Tacker

Replaces hammer and tacks at trigger rate speed. Shoots a staple wherever a tack can be driven. Ideal fastener for Carpenters, Insulators, Roofers, etc. All steel construction with chrome finish. Special screen and window shade attachments. Loads 150 staples—3/16", 1/4" and 5/16". $8.50. Rustproof "Monel" staples available.

P-22 Hand Stapler

"Reaches into hard-to-get-at places." Ideal for tagging, wrappings, sealing bags, etc. All steel construction with chrome finish. Same machine takes 1/4" and 5/16" staples. Loads 150 staples. $6.00.



2202 Standard

Precision built Stapler and Tacker. All steel construction with chrome finish. Fastens up to 40 sheets of paper. Loads 210 Standard Staples ½" x ¾". Temporary and Permanent Stitch. Price $5.00.

Slightly higher in the West and Canada

BUY FROM YOUR LOCAL DEALER OR ORDER DIRECT—DEPT. AB

ARROW FASTENER COMPANY, INC.

30-38 Maujer St., Brooklyn 6, New York

Red Cedar Closet Lining

Brown's
SUPERCEDAR

NATIONALLY ADVERTISED

Guaranteed 90% Red Heart or Better

Only SUPERCEDAR is of the same uniform high quality standard that guarantees every package to contain 90% Red Heart or better, and 100% oil content that produces the pleasing aroma.

ALL WIDTHS PUT-UP 40 FT. TO PACKAGE

More home builders are specifying cedar lined closets today than ever and Brown's SUPERCEDAR is nationally advertised to thousands of new home prospects, architects and builders. SUPERCEDAR closet lining is surfaced, tongue and grooved, ready to put on with no waste. Packaged and sealed with the Geo. C. Brown label and guarantee, famous since 1888.

Product of
GEO. C. BROWN & CO., Inc.
GREENSBORO, N. C. ESTABLISHED 1888

LARGEST MANUFACTURERS OF AROMATIC RED CEDAR IN THE WORLD

turn houses into cash . . . faster

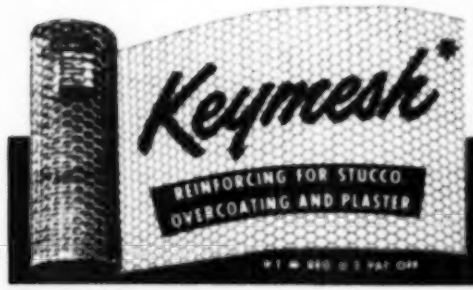
Here's how to build attractive, durable houses at prices that appeal to home buyers . . . and with extra features that help close sales quickly.

When you add new, modern attractiveness to your houses, and cut costs in the process, you're bound to attract more buyers.

That's what happens when you build with modern, reinforced concrete stucco . . . according to the Keystone System of Stucco Application.

Stucco's design possibilities fit perfectly with modern house styling. Stucco's lower cost not only reduces house prices, but also permits the addition of extra features in your houses that increase their sales appeal.

The Keystone System of Stucco Application assures durability in stucco construction. Stucco applied the Keystone way is on to stay because heavy-gauge Keymesh Reinforcing is embedded in the center of the slab.



For complete information about the Keystone System of Stucco Application, write for your copy of the 44-page "Keystone System" book.

KEYSTONE STEEL & WIRE COMPANY
Peoria 7, Illinois

Manufacturers of Keymesh Reinforcing · Nails · Welded Fabric · Tie Wire

Modern, Durable Stucco Calls for KEYMESH

Ualco

The Fastest Selling

ALUMINUM CASEMENT WINDOWS

in the World!

Why? . . IT'S THE LIFETIME* WINDOW at a ONE-TIME COST

Your prospects want Ualco Lifetime Aluminum Casement Windows! They want them because these windows cost only a little more at first . . a lot less within a few years.

Upkeep on Ualco is nil . . is absolutely nothing. That's why Ualco sales soar! That's why your profits pyramid! And that's why it can be worth a few minutes of your time to get complete details . . now!

Write for this **FREE CATALOG** *Today!*

*Registered U.S. Pat. Off.

UNION ALUMINUM COMPANY, Inc.
Department A-55 • Sheffield, Alabama

Gentlemen: Without obligation, please send me your Ualco catalog. Please check:

I am an ____Architect, ____Building Supply Dealer, ____Building Contractor.

Name ____ Title ____

Company ____

Street ____

City ____ Zone ____ State ____

How Contractor Saved Money On Special Flooring Job

LAYING a new floor of first grade tongue-and-groove maple for the Rollercade skating rink at Berdan and Haverhill Drives, Toledo, Ohio, presented a number of unusual problems for Ray Willis, floor contractor and manager of the Superior Floor Laying and Surfacing Co., Toledo, Ohio.

The new floor was laid in a rotunda design in which the 25/32 inches by

ROUTER and shaper is used to put tongue on ends of center boards cut on radius

1½ inches maple flooring was laid flat and curved in the shape of a large oval. The inner curve of this floor has a 17½ foot radius—one of the smallest radii of any yet laid in which the strips are laid flat. This required a sharp curvature of the boards at both ends of the floor.

TOUGHEST curves were near center in laying this Rollercade floor. Workman is shown placing strips at outer edge of floor where radius is greater

There are two methods that may be used in laying this type of floor. In one method, a form is nailed in place to outline the center area or "core" of the rotunda design. The boards are then laid in a forced curve beginning

(*Continued on page 172*)

a shopping center for builders...

A central market place for the builder — where he can fill all his structural steel needs — that's International Steel. International will furnish you with steel, from single building items — steel trusses, columns, girders, joists, windows, stairs, doors — to complete all-steel buildings . . . whatever your jobs require.

International's staff of expert designers, estimators, and engineers is always ready to help you with any building problem. Write today.

International All Steel Building, built for the Denny Cheese Factory Equipment Co.

INTERNATIONAL STEEL CO.

1804 EDGAR ST. • EVANSVILLE 7, IND.

FLOAT CONCRETE 5 TIMES FASTER EASIER THAN BY HAND

SYNTRON

VIBRATING FLOATS

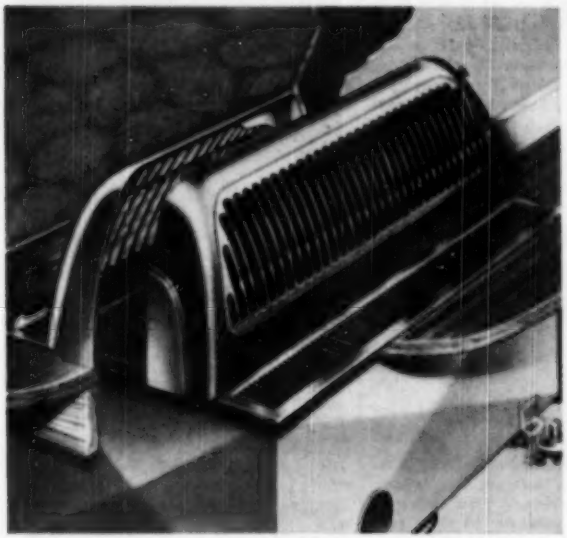
Use on a stiff, dry mix.
Get 30% stronger, denser floors.
Two models, 24" and 30" wide.

Write for folder

SYNTRON CO.

618 Lexington, Homer City, Pa.

Modern automatic heat that's low-cost and easy to install...helps sell houses faster

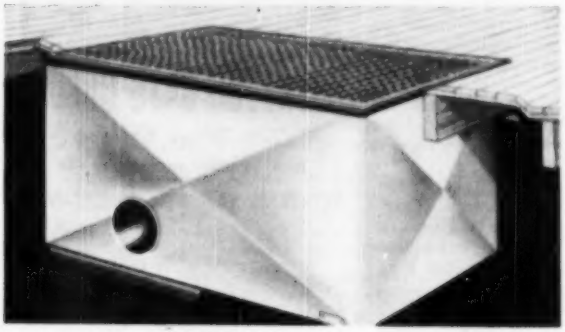


DUAL WALL MODEL fits beneath partition or wall and heats adjoining rooms.

Coleman Floor Furnaces

Models for Gas, Oil and LP-gas

ECONOMICAL FOR BUILDER AND BUYER—The modern low-cost heating unit that keeps costs down. The Coleman Floor Furnace fits in the floor and gives clean, silent, economical heating. Installation is easy and low-cost because (1) No basement or pit is needed; (2) There's no expensive plumbing; (3) There are no air ducts. A Coleman makes and *moves* the heat for *circulated* warm air through 4 to 5 rooms, with a complete change of warm air 3 to 5 times an hour.



FLAT REGISTER MODEL lies flush with floor. Easy and economical to install!

FLAT REGISTER AND DUAL WALL MODELS—The Flat Register Model lies flush with the floor. The Dual Wall model fits beneath wall or partition to heat adjoining rooms at same time. Coleman Floor Furnaces come in models from 25,000 to 70,000 BTU rating. Coleman makes them for Gas, Oil and LP-gas. Not an adaptation but a complete new heat engineering job throughout. Send coupon for more information.

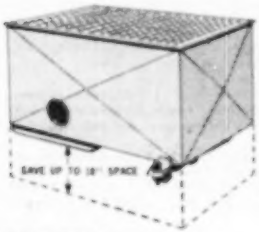
Also in Dual Wall model to heat two adjoining rooms at the same time

Saves space • Saves cost

COLEMAN'S

***Handy* GAS WALL HEATER**

Fits in wall between upright studs; extends out only 3⅝". Uses no room space. Ideal for slab-floor homes. A heat-mover that circulates warm air. A heater of many uses.



SHALLOFLOW

The little furnace with big-furnace heat! So shallow it saves up to 18" on depth. It's flood-proof to 19" below floor. Though small, it has the dependable heating efficiency for which the larger models are famous.

THE COLEMAN COMPANY, INC.
WICHITA 1 KANSAS

COMFORT COSTS SO LITTLE WITH A **Coleman**

World's largest manufacturer of home heating equipment

The Coleman Company, Inc., Dept. AB-754, Wichita 1, Kansas

Please send information on:

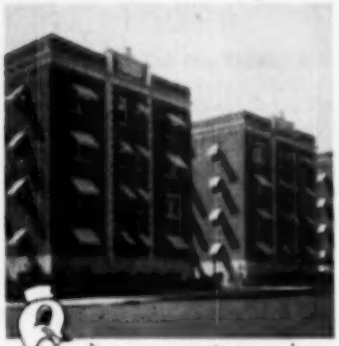
☐ Coleman Floor Furnace
☐ Coleman Gas Wall Heater

State whether ☐ Gas ☐ Oil ☐ LP-gas

Name _____

Street _____

City _____ Zone _____ State _____



You can count on a long-lasting, moisture-resistant seal when you use Cabot's Clear Waterproofings.

PREVENT EXPENSIVE WATER DAMAGE

Protects both you and the owner against damage caused by water seepage . . . freezing and thawing . . . unsightly efflorescence. Cabot's Waterproofings penetrate deep into voids and pores of masonry walls . . . provide long-lasting, moisture-resistant seal. Walls treated as many as twenty years ago with Cabot's Waterproofings are still moisture-proof today.

Whether you're building one house or a development, if you use above-grade masonry, protect it with Cabot's Waterproofings.

- **For Cement, Stucco, Cast Stone and all light colored masonry . . . use Cabot's Clear Cement Waterproofing.**
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Write Today for samples of Cabot's Waterproofings and complete information. Address:

SAMUEL CABOT, INC.

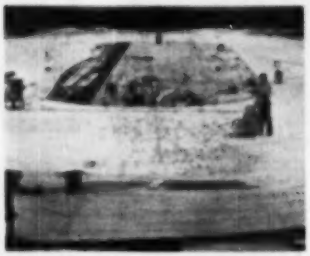
551 Oliver Bldg.
Boston 9, Mass.

How Contractor Saved . . .

(*Continued from page 170*)

at this form and proceeding outwards toward the edges until the entire outer area is laid. Then the center form is removed and the inner "core" is laid of straight boards—whose ends have been cut on a radius and a tongue put on. This method was chosen by Mr. Willis for this job.

The other method, which requires a portable router, starts by laying the center "core" area first. Then the portable shaper and router are used



CENTER area is left open, filled in later with strips laid straight. Parts of floor in Rollercade are being sanded while work of laying the floor proceeds

to trim the ends to a chalk line at the proper radius and add a tongue to the ends. This serves as the form for the curves in the rotunda design. Willis believes this second method would have advantages over the first method—but as he did not have a portable router available when he started the job, he elected to proceed by the first method.

The floor is 220 feet by 120 feet, total area 26,400 square feet. Originally the building had been used for ice skating. Then a maple floor was laid about six years ago, and it re-

FINAL cut is made with No. 1 grit, using American 8-inch heavy duty sanders

ceived hard and rigorous wear as a roller skating rink. The new rotunda type floor was laid over the old floor, using a 30 pound creosote treated felt paper as a base. Eight men worked on the flooring job which was completed in 15 days.

(*Continued on page 174*)

SYMONS FORMING SYSTEM

SAVES TIME

Inset shows how Symons System saves time in erecting and stripping forms. Bolt passes through 2 x 4 studs and no loop. Wedge secures the assembly. This simple device cuts forming time 50%.

SAVES LABOR

Harry G. Dobring, Foreman, Taylor Brothers, South Bend, Ind., states "Seven men set up the forms for a 26' x 27' foundation in one hour and fifteen minutes."

SAVES COST

With Time and Labor cut in two . . . Plus savings in nails, spreaders, wales and bracing . . . Plus for greater reuse of forms . . . Costs drop to a new low.

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"The Magic Balancer and Holder in One" is the

Answer to your window problems!

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- Installation less than 1 minute. Easy to install.
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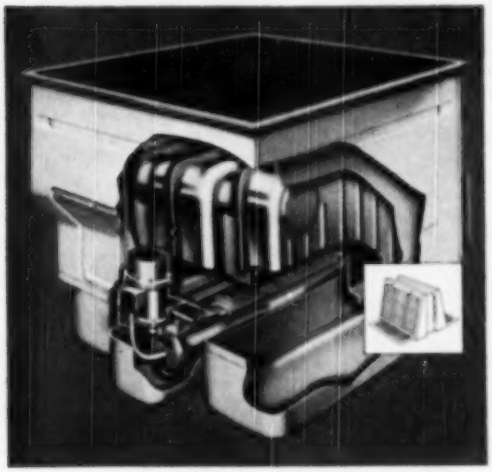
DEALERS: Write or wire for descriptive literature and liberal discounts. Free demonstrator window with first order of ½ gross or more. Ad mats on request.

ROCKFORD SASH HOLDER, INC.
507 EMPIRE BUILDING • 303 S. MAIN STREET
ROCKFORD, ILLINOIS

NEW gas floor furnace facts!

You may know gas floor furnaces from A to Z. But if you haven't checked "Duo-Therm" lately, your facts may be as dated as last year's fishing license.



What's hot that Duo-Therm's got?

4 Feature-Packed Gas Floor Furnaces with—

Exclusive Equaflame Burner. Built to give long-life plus efficient performance with all types of gas. Clean-burning, quiet and trouble-free. Burns a uniform flame at *all* ports at *all* stages of fire.

Exclusive Comfort Selector. Eliminates "chills and fever" heating. Gets rid of that off-and-on, on-and-off operation. A flip of the switch on the side of the thermostat tailors low fire setting to fit the weather.

Revolutionary All-in-One Control. A compact, complete performance-packed package that's a cinch to convert to automatic at any time. Automatic safety shut-off standard on all models.

Generous 10-Year Warranty—on all models.

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Plus More Built-in Builder Benefits than we could list on this whole page!

- All models shipped ready to install quickly and easily.
- So compact that only one joist need be cut on any installation!
- Designed so most service jobs can be handled from above the floor.
- Built to Duo-Therm quality standards, yet priced amazingly low.
- Two Series—shallow and standard—to fit any home.
- Choice of floor or dual-wall registers on all models.
- Range of BTU inputs from 35,000 to 60,000.
- Thermostatic or manual controls available on every model.
- Waterproofed to meet regional FHA requirements.
- AGA approved.

Get the facts about Duo-Therm's
LIBERAL BUILDER DISCOUNT PLAN
Ask your Duo-Therm supplier for the inside story on special single and quantity discounts to fit your needs.

FREE! Get the "Specs" on the Duo-Therm Gas Floor Furnace Story!

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Fill out and mail coupon for descriptive literature.

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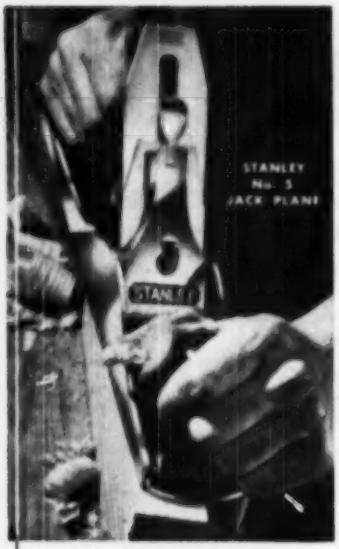
Lansing 5, Michigan.
Please send your floor furnace literature pronto, without obligation or cost.

My name_____

Firm_____

Firm address_____

City_____ Zone____ State_____



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Make the most of your skill

The choice of 9 out of 10 woodworkers, Stanley Planes feel right . . . work right. These planes—and many other types of planes—are part of the complete line of Stanley Tools. When you buy tools, look for this famous trade-mark. Stanley Tools, New Britain, Conn.

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STANLEY

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HARDWARE - TOOLS
ELECTRIC TOOLS - STEEL STRAPPING - STEEL

How Contractor Saved . . .

(Continued from page 172)

First step in starting the job was to examine the old floor carefully, as this would be the subfloor for the new installation. All dirt was removed, broken boards were replaced, raised nails were driven down, and the contractor made sure the floor was level and solid. The old floor was swept clean, using no water.

Then the felt paper was laid. Next an area in the center was chalked in the shape of an oval 100 feet long and 35 feet wide. A form was made of wood strips nailed down to outline the perimeter of this oval.

Then the contractor started laying the strips, beginning with the smallest radius curves at the end of the oval and proceeding outwards from the form. A special jack was used for bending the strips which were laid flat. The workmen laid a width of about twelve strips at a time around the oval.

Proper nails and correct nailing are important in every flooring job to hold the flooring securely in place, make the floor rigid, and prevent squeaks. In this particular installation the contractor used heat-tempered #7 "Screw-tite" nails. These nails were required to anchor the strips firmly under the stresses and strains of forced curving. The nails were started through the strip where the tongue leaves the shoulder, and driven inwardly at an angle of 45 to 50 degrees to the floor. The nails were spaced approximately 8 inches apart on the curves, and 12 inches apart on the straightaways.

Drawing up is also an important part of proper installation—especially on straight sections. Where curves are forced, this operation usually eliminates the need for additional drawing up. After laying three or four strips of the flooring in the straightaway areas, the workmen placed a short piece of straight-edged hardwood against the tongue of the outside strip of flooring and drove it up snugly. This located the flooring strips in their proper final position.

In this manner the oval was completed to the edges of the room on three sides and to a halfway area on the fourth side. As this hallway was to be laid of straight strips, the contractor used a portable router to cut off the irregular edges of the oval in a straight line. He then put a tongue on the edge of these strips, to match the grooves of strips laid straight in the hallway.

To fill in the core of the oval, the

(Continued on page 176)

New portable

KOHLER

ELECTRIC PLANT

saves time... lowers costs!

Carry your own electricity. Finish more jobs in less time. Operate electric saws, drills, pipe threaders, cutters. Avoid delays, trouble, expense of arranging power hook-up. This compact Kohler plant has a rating of 1000 watts for general use, 1500 watts maximum for intermittent duty. Operates tools having universal (AC-DC) motors. Weighs only 75 lbs. Easy to carry by convenient handle. Powered by quick-starting, 4-cycle, air-cooled Kohler Engine. Complete with ½ gallon fuel tank. Low in cost. Many other sizes available. Write for folder K-11. Kohler Co., Kohler, Wisconsin.

Model TMSK12, *1000 watts, 115 volt DC. Manual control. Length 13", width 14", height 12".*

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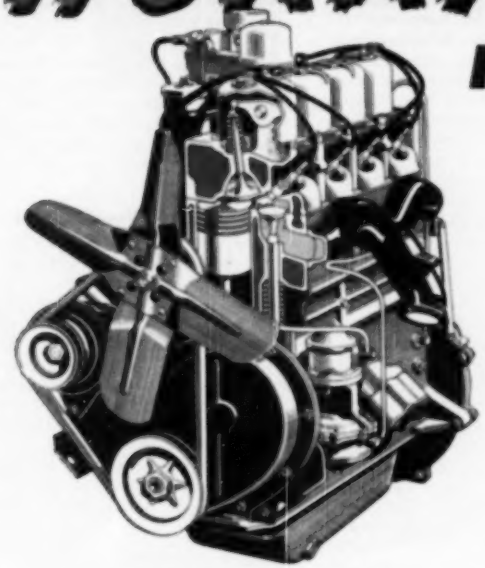
PLUMBING FIXTURES - HEATING EQUIPMENT - ELECTRIC PLANTS - AIR-COOLED ENGINES

WILLYS' NEW HURRICANE F-HEAD ENGINE



7.4-1 COMPRESSION GIVES MORE POWER, MORE MILEAGE

You are looking at America's newest, most advanced engine. It is a 4-cylinder, F-head engine—with valve-in-head intake and valve-in-block exhaust. It has 7.4-1 compression, but does not require premium fuel. Its short, evenly-heated intake manifold and giant-size intake valve deliver a full charge of fuel mixture to each cylinder at any speed. It literally squeezes more energy from every drop of gas, giving lower fuel consumption and higher horsepower. See the new Willys models with the *HURRICANE* Engine at Willys Dealers.

THE NEW WILLYS STATION WAGON

Here's the new all-steel Willys Station Wagon . . . handsomely restyled . . . *HURRICANE*-powered for stepped-up performance and long mileage. It's two cars in one—a comfortable passenger car and, with seats out, a big-cargo vehicle for hauling.

A New 1/2-Ton Truck

WITH "HURRICANE" POWER

With its money-saving *HURRICANE* Engine and long-lasting functional body, this new ½-ton Willys Truck is the top buy in its field. Comfortable cab . . . sensible fenders . . . high road clearance . . . a host of other features. 118-inch wheelbase; 4250 lbs. GVW.

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when you specify MYERS Water Systems

Today's rural home buyer has an especially critical eye for equipment quality. And that's where Myers Water Systems can stand you in best sales stead. Your soundest prospects are *doubly pre-sold* on Myers quality: (1) by the most consistent, most comprehensive advertising in the field; (2) and by the enthusiastic endorsement of their Myers equipment by long-time owners. Wherever you build beyond city water mains, you'll speed up sales by specifying Myers Water Systems. You'll get the *right* system, too—because the full Myers line of *Ejecto* and Reciprocating Types covers every possible need. Mail coupon for catalogs and name of nearest distributor.

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Send free literature on
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Name _____
Town _____ R.F.D. _____
County _____ State _____

How Contractor Saved . . .

(Continued from page 174)

form was removed and strips were laid straight in this area. Each end of center boards was cut on a radius, and a tongue was put on using a router and shaper.

The sanding operation included two cuts, using #2 and #1 grits. The contractor employed a full complement of American machines, including two Super 8-inch sanders, two standard 8-inch sanders, three edgers, one sand-erplane belt sander and two Deluxe floor maintenance machines. In using the Super 8 sanders with #1 grit, he made a cut at 2200 RPM, 65 pound pressure, with 220 volt current. By using these machines, he eliminated one cut. He followed the grain on all cuts, sanding a quarter of the oval at a time.

It is important to have adequate capacity in both cable and current. The cable used by Willis was #8 and #10, high-grade rubber-covered cable. As the current tested a full 220, in this instance, a booster was not required. However, a voltage booster will many times save money for the contractor by assuring full power on the job. This avoids damage to equipment and prevents loss of time and labor through slow-operating machines. A new booster for this purpose is manufactured by the American Floor Surfacing Machine Co., Toledo, Ohio, which will transform weak voltages of 95 or 105 volts to a full 115 or 230 volts. Also, it boosts 115 or 208 to 230 volts . . . and will reduce 208 volts to 115 volts. All portable electric equipment up to 5 H.P. can be operated with a booster of this type.

Suppliers for this job: American Floor Surfacing Machine Co., Toledo, O.—American Super 8 Floor Sander Atlas Company, Kalamazoo, Mich.—Tongue-and-Grove Router Horner Flooring Co., Dollar Bay, Mich.—manufacturing of maple flooring Independent Nail and Packing Co., Bridgewater, Mass. — Screw-Tite Nails.

'49 Seedling Production

More than 380,000,000 seedlings were produced in the nation's nurseries in 1949, enough trees to reforest a third of a million acres, according to a survey of all federal, state and private nurseries made by J. C. McClellan, chief forester for American Forest Products Industries. McClellan said that, assuming a survival rate of two-thirds, the 1949 crop will in a half century supply the country's wood needs for a year. Estimates for 1950 call for more than 500,000 seedlings, enough trees to reforest half a million acres.

it costs less to do sidewall jobs with "TROUBLE SAVER" Scaffold Brackets

"Trouble Saver" Scaffold Brackets save time, labor and materials.

- **Erected and dismantled faster than you can build a makeshift wooden scaffold.**
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- **Attachments to convert any one type to any other type.**
- **Corner bracket also available.**

Available through offices and distributors from coast to coast.

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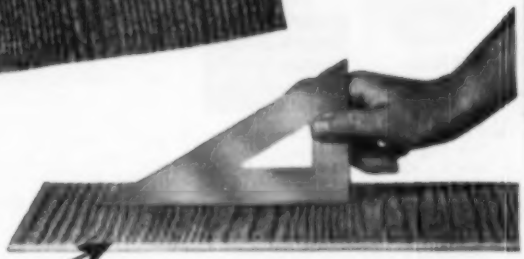
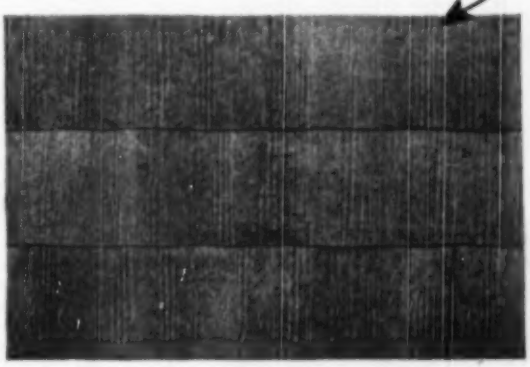


Smooth surface... no grooves...yet beautifully "grained"!



Beautiful New Colors!

Line your level against the surface of the new J-M SMOOTHGRAIN PERMATONE Shingle... you'll find it smooth and true. Now look at its beauty from any angle... you'll see a rich texture of striking character, even though the surface of the shingle is actually smooth!

These new *Smoothgrain* asbestos shingles are *stronger* because they have the same cross section throughout... they *cut cleaner* because the shingle cutter always works against a smooth surface... they *resist soiling* better and always look the same from any angle, because they have no grooves, no raised texture to catch dirt or highlights and thus distort appearance.

SMOOTHGRAIN Shingles are available in an outstanding variety of beautiful colors, all PERMATONE colors. As "Permatone" implies, the color is "sealed in"... comes from myriads of tiny ceramic granules embedded into the asbestos-cement.

The colors include Heather Green, Autumn Brown, the distinctively rich and practical Weathered Gray, and the ever-popular Silver Gray which goes well with any trim or color scheme. For full information, write Johns-Manville, Box 290, New York 16, N. Y.

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- New FASCO Turbo-Radial propeller, specially engineered for pressure through ducts . . . develops pressure unobtainable with ordinary fan blades . . . three-speed control.
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- Outside wall cap—aluminum . . . rustproof—has built-in balanced louvres. Overhang keeps out rain, drafts, cold.
- Beautifully designed . . . superbly finished . . . priced right.

FASCO wall ventilators are used by America's largest builders . . . 15,000 IN LEVITT HOUSES ALONE! The new FASCO "CEIL-N-WALL" vent will be a leader, too!

WRITE, WIRE or PHONE for complete information. FASCO Industries, Inc., 20 Union St., Rochester 2, N. Y. (Phone HAmilton 1800).

FASCO
INDUSTRIES, INC.
ROCHESTER 2, NEW YORK

'Open End' Mortgages Could Triple Spending On Home Improvements

A "gold mine of credit" is offered to firms in home improvement work by the "open end" mortgage, according to a statement by Richard G. Breeden, secretary-manager of the Insulating Siding Association. Breeden said that it has been predicted that general adoption of this method of financing could double or even triple the present two billion dollars spent annually on home improvements.

Breeden stated that while often available when FHA Title I is not, the "open end" mortgage is by no means a mere substitute, but in many cases is to be preferred to the FHA instrument, offering greater immediate and long-term advantages to the contractor, customer and lending institution.

In its purest form, he said, the provision to make additional loans is written right into the original mortgage. However, only recently have lending institutions begun writing such original mortgages and so most "open end" mortgages at present will depend upon later arrangements between the customer and his mortgage holder.

The following example was given by Breeden to illustrate the possibilities of this type of mortgage:

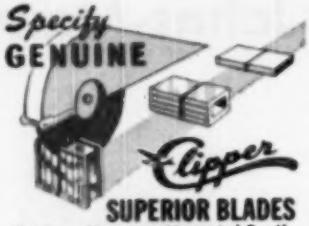
"John Jones had an original mortgage on his home of $5,000 at five per cent. How he's paid off $2,000. He decides to improve his home by having insulating siding applied. He gets an estimate of $900 for the work from a siding contractor.

"To finance this amount under Title I, with its maximum three-year term, would be too heavy a burden for him to carry. Also, because Title I loans are commonly discounted in advance, he might have to pay an interest rate which amounts, in effect, to 9½ per cent.

"However, the siding contractor points out that the agency holding his mortgage probably would advance the $900 under the original mortgage terms. The agency advances the money, simply adding the amount to the remainder due on the mortgage and increasing the monthly payments slightly to make up the difference."

Breeden pointed out that the various means of writing "open end" mortgages depended on the legal requirements of each state and locality; and that, while it is a matter which is the concern of the lending institution and not the contractor, the contractor should be well-acquainted with basic legal problems and local policies governing such transactions.

Specify GENUINE



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Regardless of hardness . . . there's a GENUINE Clipper Superior Blade to cut any masonry material with perfect smoothness and real economy.

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Because of the tremendous variety of masonry materials the correct Clipper Blade for your . . . Brick-Tile-Stone or Concrete Product . . . can only be recommended by masonry Specialists! "SAME DAY" Shipment from 9 Clipper Branches or the EXACT Specification for any material . . . WRITE TODAY and mention the material!

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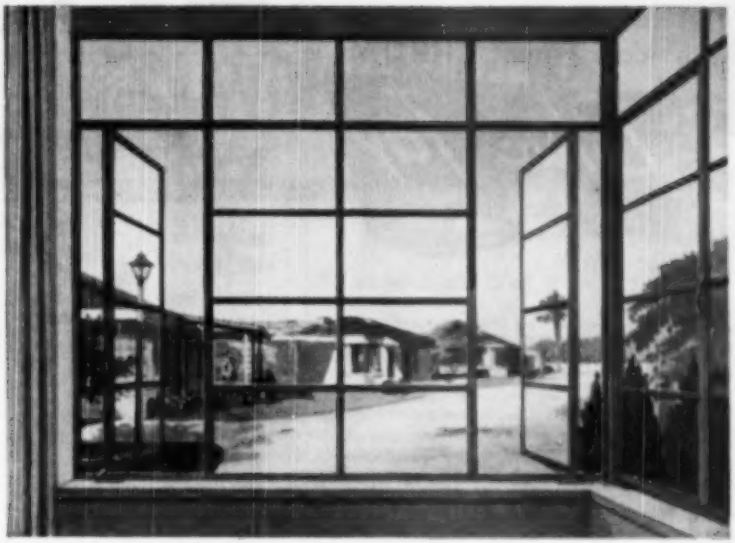
Town and Country Lodge, a winter resort at Phoenix, Arizona, equipped with Lupton Steel Casement Windows.



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Builders like the economy features of Lupton Metal Windows: (1) Easy-to-install, they save time on the job; (2) Available for immediate delivery from warehouse stock; (3) Complete with finest operating hardware.

Lupton Casements are available in steel and aluminum. Frames are precision built at every point . . . will not warp, swell or shrink. Neat, metal frame screens and glass insulating panels are easily attached on the inside of the window. Catalog with list of representatives sent on request.

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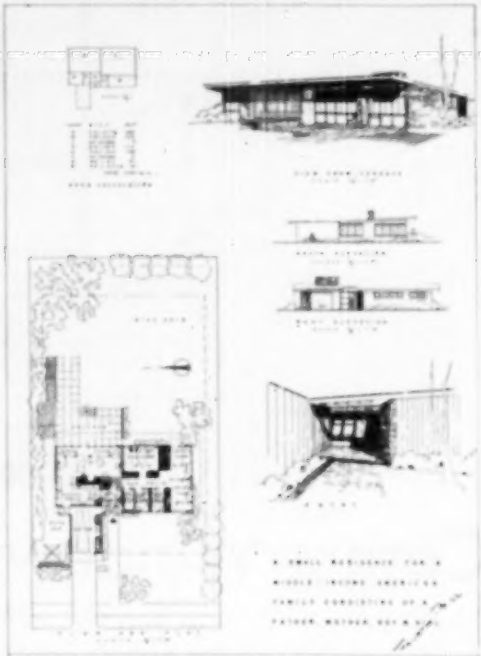


AMERICAN BUILDER PRIZE HOME COMPETITION

AMERICAN BUILDER assures its readers that it does not go in for guessing games, even though it inadvertently omitted the name of the fourth prize winner in its recent women's architectural contest when the winning entries were reviewed in the April issue. This excellent design (Page 79, April) was submitted by MISS NANCY C. REEVES, to whom we humbly apologize. Miss Reeves is a student at the UNIVERSITY of TEXAS, to which institution we also express our regrets. A reproduction of the entry is shown above. For more complete details, including judges' commentary, see April issue

From Excavation to Trim . . .

(*Continued from page 89*)

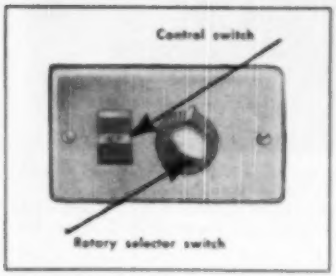
man Square development. All houses on corner lots have fireplaces and breezeways, which create a secluded patio. Every house has a two-car garage, either attached or detached. Lots have a minimum of 6,000 square feet. The project has paved streets, concrete curbs, sidewalks, sewers, and asphalt driveways. Front lawn and shrubs are planted, and clothes poles and incinerators installed.

Prospective buyers have a choice of interior paint colors and floor coverings, and if they specify may have tile in bath and kitchen and stainless steel drainboards. The first buyers in a block are given a choice of approved exterior colors and subsequent purchasers may select colors which harmonize with the others. A choice between asphalt shingle and Dolomite granule roofs is also given.

Other features of the homes are Waste King Pulverators, enameled kitchen finish, electric bath heaters, door chimes and select oak floors. Sale prices had not been definitely determined, but it was stated that the two-bedroom homes were expected to sell for not more than $8,250; three-bedroom not over $8,950; and those on corner lots with fireplaces and breezeways, $9,650 or less.

WIRING NEWS

A PERIODICAL DIGEST OF WIRING IDEAS FROM THE GENERAL ELECTRIC CONSTRUCTION MATERIALS DEPARTMENT



Master Selector Switch Increases Versatility Of Remote Control!

Here's the newest addition to General Electric's increasingly popular remote-control wiring system—an addition that makes practical a wide variety of new applications. Replacing separate ON and OFF controls for each circuit, this compact master selector switch provides instant, positive control of *up to 9 different* circuits—and, very simply, too!

To Control Individual Circuits

Turn rotary selector switch to the desired circuit and then press the control switch for ON or OFF.

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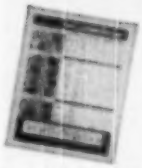
Merely press the control switch ON or OFF while rotating the selector switch through all nine positions.

Plan to use it as a selling tool . . . for unobtrusive bedside control of home lighting circuits . . . for sure, certain emergency light control in warehouses, banks, office buildings . . . for varying the lighting of display areas . . . or wherever else one-point, multi-circuit control is needed.

The G-E master selector fits all standard mountings for flush devices. See it at your local General Electric distributor's or check box (A) below.

Free Guide Speeds Box Selection



To make your next job an easy, certain one, General Electric offers free a new switch and outlet box chart. With this handy specification aid, you'll know at a glance the proper outlet, switch, or utility box for any wiring job.

Printed in color and carefully illustrated this new *Box Buyer's Guide* gives the dimensions of all standard boxes. It shows the number of conductors—by wire size—permitted by the National Electrical Code for the various box sizes and types.

Get your copy today—order some for your contractors, too—just check box (B) in the coupon.

PVX For Better Profit!

That's right, General Electric PVX® nonmetallic-sheathed cable answers the problems of decreasing the time and costs of wiring—*without* sacrificing either quality or permanence.

When "roughing in" commercial or residential jobs, the light weight and small diameter of PVX pays off in faster handling. You'll like the easy way it strips clean for ready connection.

In "finish wiring", the small-diameter conductors leave more working room in boxes. In addition, the bright colors of PVX insulation assure quick, certain circuit identification. Use it on your next job. Check box (C) if you would like additional information.

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Why gamble? Replacements and service calls often cost many times the small savings made on lower-grade switches. So, when your plans call for switches, insist on G-E specification grade switches.

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Here's an all-purpose raceway that has all the advantages of a cable method of wiring. Yet, in installed cost, it compares favorably with other raceway systems. Available in long, continuous lengths, in many standard sizes, it has the ability to stand up under the most severe operating conditions.

G-E flexible steel conduit is made of galvanized strip steel, which, if properly installed, provides an unbroken low-resistance path to ground. It requires no tools for bending or threading, and only a few simple fittings are necessary in its installation.

General Electric flexible steel conduit saves time and money—its smooth interior surface makes wire pulling easy. For information on "flex" check (D) in the coupon.

Tough Cords For Rough Jobs!

Whether it's for a powerful portable saw . . . heavy-duty floor sander . . . or light hand drill—you'll do well to get a hard-working General Electric flexible cord to keep it operating with uninterrupted power.

All General Electric cords are built to absorb the rough handling and abuse customary at construction sites. There are cords for every purpose—cords that can take repeated hard knocks and flexing . . . cords that resist water, oils, alkalies, grease, and sunlight . . . cords that can also withstand abrasion and kinking.

G-E flexible cords are made in a variety of types and sizes for medium- and heavy-duty use. Look into their advantages before you make any cord replacements. For further information, check box (E) in the coupon below.

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Construction Materials Department, General Electric Company, Bridgeport 2, Connecticut

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- B ☐ Box Buyer's Guide ( ) copies
- C ☐ PVX Cable
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with SAFWAY Steel Scaffolding

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Write for free literature today . . . ask for Bulletin AB-550

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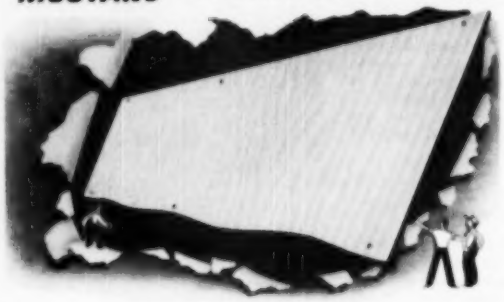
MILWAUKEE 13, WIS.
Manufacturers of Tubular Steel Scaffolding and Equipment

MUSTANG

The New Mustang Asbestos Cement Shingle



STRONGER After two years of research Mustang engineers bring you a new ASBESTOS CEMENT SHINGLE with greatly increased strength.

WHITER This new Mustang Shingle is whiter, too—much whiter! Sidewalls of fireproof Mustangs have all the glistening whiteness of sunlighted snow.

WATERPROOF New Mustangs shed water like a duck's back! A waterproof coating enables Mustangs to withstand weather. Each rain washes off dirt.

WRITE TODAY For Free Descriptive Folder and Name of Nearest Dealer.

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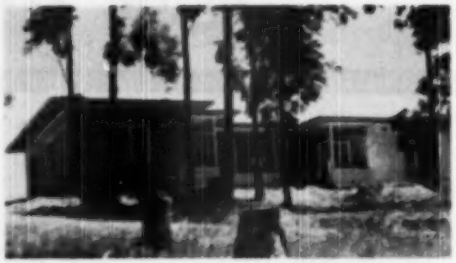
THE ASBESTOS CO. OF TEXAS

Rammed-Earth Building Improved in Australia



MODERN Australian pise house built for Sydney, New South Wales, businessman. Portion of exterior, rendered in a stabilized earth composition devised by an engineer of the Commonwealth Experimental Building Station, has shown no signs of cracking

MODERN homes are being built in Australia in one of the world's oldest building materials—rammed-earth, or pisé de terre. But the ingenuity of officers of the Australian Commonwealth Experimental Building Station has brought new methods to speed up the ancient craft.

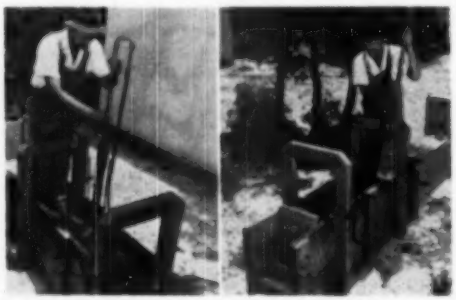
Rammed-earth construction differs from adobe, another very old system of building, in that it consists of slightly moistened earth compacted into walls by tamping down inside a wooden frame, so that the whole building is "monolithic," whereas adobe consists of puddled-earth bricks sun-dried, and built up brick by brick.

Pisé buildings are in existence in all the states of Australia, but by far the most are in the largest state, New South Wales. The 1947 census showed 2,899 dwellings in existence in this material in Australia—2,320 of them in New South Wales.

Between 1933 and 1947 over 300 homes had been built in pisé in the six States. More are being built now—one, at least, of modern design, in the outer Sydney suburb of Baulkham Hills. The local bowls club at Denistone, another Sydney suburb, has plans ready for the erection of a fine club house in this material.

Many of Australia's rammed-earth buildings have been standing for decades. There is a church at Leeton, in the

(Continued on page 184)



TWO new inventions of the experimental station designed to speed-up building in pise, demonstrated by station workman. Pneumatic tamper (left) gives faster, more efficient results than a hand implement. "Crawlerform" (right) uses clamps instead of old method of bolting through the pise, and is equipped with rollers to facilitate its movement from completed to a new section

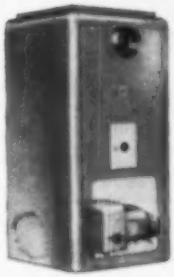
Build Sales Appeal into your new homes . . . With

DELCO-HEAT Conditionairs

. . . engineered by General Motors especially for today's popular sized homes!

OPC Conditionair

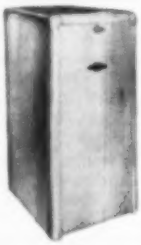
Oil-fired Conditionair—designed expressly for utility room or closet installations. Three sides of the unit are clear of flue outlet, controls, etc., for easy installation in recessed areas. Cold air may be returned at either side or at bottom of blower unit. Capacity 75,000 BTU's.



OVC Conditionair

Compact, efficient, oil-fired Conditionair. Two-stage Delco-Heat vaporizing oil burner gives clean, economical combustion. Ideally suited to today's smaller homes with basements. In gravity systems, the circulation of warmed air results in an efficient, economical automatic heat. Capacity 66,000 BTU's. Also available with blower-filter unit—capacities from 75,500 BTU's.

Using radiant heat? Delco Heat boiler answers small homes needs!



The Series "S" oil-fired Boiler is perfectly suited for radiant heating systems—or conventional steam or hot water systems—in popular-size homes. The location of the oil burner and controls on the front of the unit makes it ideal for installations in restricted areas or utility rooms.

Delco Heat's new low-cost Conversion Oil Burner

The Series "E" Conversion Oil Burner is a true General Motors value at an outstandingly low price. Has Delco-Heat Rigidframe Motor, precision-built fuel pump, stainless steel nozzle, large capacity centrifugal-type fan, heavy duty moisture-proof transformer and scientifically designed turbulator.

New Reverse Flow Conditionair

Designed for the revolutionary new low cost, warm air-radiant "perimeter heating systems! The Delco-Heat OPC-75HR is an oil-fired Conditionair in which air is forced *downward* over heat exchanger to be distributed from bottom of Conditionair. In "perimeter" systems, this provides both *steady radiant heat* and responsive *forced warm air heat!*

Delco-Heat also manufactures gas-fired Conditionairs, large capacity oil-fired Conditionairs, Boilers and Conversion Burners.

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Please send me complete details and specifications on the following Delco-Heat units: .....

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It Pays to Give Home Buyers Lawns that Stay Beautiful

Whether you sell your homes completely landscaped or make the lawn after the owner has moved in, you can't afford to skimp on the lawn seed, and run the risk of a disgruntled owner.

WHITNEY'S Lawn Seed is super-refined to remove weeds and chaff. And it's tested and proved for high germination. In other words, it's dependable. It grows lawns that are thick and sturdy.

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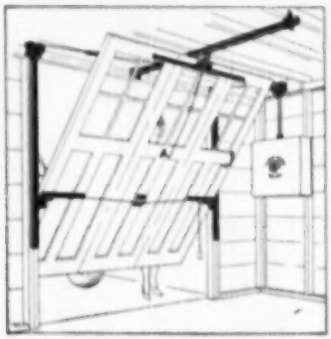
WHITNEY SEED CO., INC., Buffalo 5, N. Y.

50-50 PUSH-OVER
GARAGE DOOR HARDWARE



ALLITH

Heavy duty, well-engineered garage door hardware. Result: a quickly installed, easily operated, overhead door. Designed to insure **customer satisfaction.**

Standard set fits any opening up to 9' wide x 7'6" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high.

ALLITH-PROUTY, INC
DANVILLE, ILLINOIS

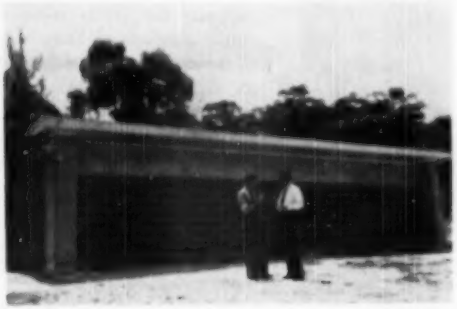
Rammed-Earth Building . . .

(Continued from page 182)

Murrumbidgee River irrigation area, still in excellent condition after 40 years. Other buildings in various parts of Australia have been standing for nearly a century. Many farmers and building contractors who recently saw a demonstration of the method in inland New South Wales announced their intention of using it for future construction. Broken Hill, Corowa, Cootamundra, Junee and Temora in New South Wales, and Eltham in Victoria are among the centers where pisé is popular.

Earth as a building material has these advantages: it costs nothing, does not need to be transported to the site, requires less skilled labor in the work of construction than other materials, and provides a dwelling that is cool in summer and warm in winter.

Its worst foe, of course, is water, and apart from improving building methods, research at the Commonwealth Experimental Building Station has been concentrated on the treatment of the exteriors of earth-built houses to make



FOUR-VEHICLE garage built of rammed-earth at Australian experimental station. Side and back walls are rendered with bituminous emulsion to protect earth surface; front pillars are cement-faced; and roof is covered with bituminous sheeting

them resistant to weather and to make the composition of the walls themselves more stable.

Experience has shown that most ordinary earths are suitable for pisé, or may be made so by admixture. The best consistency, however, is about 30 per cent of clay by loose volume (including silt and loam) and 70 per cent of sand (including gravel and other granular materials), with a moisture content of 7 to 9 per cent.

The reverse is the case with adobe construction, in which the clay content must preponderate, and the material to be made into the adobe bricks must be of the consistency of thick mud.

Binding of the material in pisé into strong, solid wall is brought about by the mechanical interlocking of the earth particles through compaction.

Chemical action and the pressure of thousands of tons of earth produced most of the world's rocks. The ramming of the earth used in pisé, plus a similar action, produces the approximation of soft stone which forms the monolithic building.

Information on rammed-earth construction is exchanged with India and South Africa by the Australian Commonwealth Experimental Building Station. The Station has also been aided in its researches by material from Britain, the United States and Russia, where extensive rebuilding of war-wrecked cities is being carried out in pisé. Correspondence on the method is carried out with tropical countries such as New Guinea. The Station is the centre

(Continued on page 186)

TRUSCON MARK OF MERIT PRODUCTS

TRUSCON *Double-Hung* STEEL WINDOWS SERIES 138

doubly *durable*...

64 Truscon Series 138 Double-Hung Steel Windows in G. W. McIntosh residence, Omaha, Nebraska. Steele, Sandham & Steele, Architects.

Truscon Series 138 Double-Hung Steel Windows in Garth Woods Apartments, Scarsdale, New York. Geo. F. Pelham, Architect; Frank Morell Construction Co. Inc., Contractors.

doubly *economical*...

Truscon specialized formed-steel frame and sash construction builds high strength into these steel windows of pleasing design. This form of construction assures structural rigidity, and freedom from depreciation. Truscon Double-Hung Steel Windows have fingertip control with motor type spring balances, complete factory weatherstripping in stainless steel, solid bronze lever lift handles and sweep lock. And, of course, there are the traditional Truscon Steel Window features of no warping, sagging, binding or sticking. No rotting and necessary replacement. For residential and commercial use, in a wide range of types and sizes. Free illustrated literature on Truscon Series 138 Steel Windows on request.

FREE Book on Truscon Steel Windows. Write for it. The Truscon Steel Company Manufactures a Complete Line of Residential Double Hung Windows . . . Residential Casements . . . Security and Basement Windows . . . Screens and Storm Sash . . . Metal Lath Products . . . Industrial Steel Doors . . . Coal Chute Doors . . . Steel Lintels . . . Concrete Bars . . . Welded Steel Fabric.

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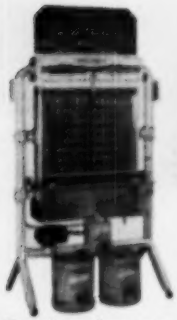

This photo shows continuous streams of water being directed from the top onto two brick panels, one of which has been treated with CRYSTAL.

SEE HOW CRYSTAL STOPS WATER ABSORBTION

This is the other side of the panels. The CRYSTAL-treated panel is on the left.

What a Difference! **After 2800 hours of continuous exposure to water, the CRYSTAL-treated panel is completely free of the waterlogged appearance and efflorescence so evident in the untreated panel.**

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STRAIGHT-LINE action sands up to moldings. Does not sand cross grain, cut swirls, eye winkers or other hard to cover abrasive patterns. NO HAND CLEAN UP WHEN YOU USE AN EASY.

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Plus EASY'S REPUTATION FOR TROUBLE-FREE LOW COST MAINTENANCE

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Rammed-Earth Building . . .

(Continued from page 184)

of research in the British Empire on methods of building in hot climates.

Founded in 1944 by the Federal Department of Works and Housing the Station now has a staff of 60 which includes architects, engineers, physicists, model builders and experts in other sciences. It extends over 40 acres of bushland at Ryde, nine miles from Sydney. It advises Federal and State governments on building projects, and publishes periodical documents which are eagerly sought by those connected with the building industry.

For two years, G. F. Middleton, architect with the Station, has been concentrating on pisé construction. A series of experimental walls has been erected in the grounds, capped with concrete to protect the wall tops, and the effects of weathering on walls of plain rammed-earth and of rammed-earth finished with various materials are being observed.

Experimental buildings have also been erected for temperature tests and to test various renderings and treatments. Methods in use in other countries have been studied together with practices which have grown up in Australia. Those who have used the system for many years have been consulted. The condition of pisé buildings erected decades ago has been studied to complete the picture.

G. F. MIDDLETON, in charge of pise research at the station, shows experimental wall sections used to test weathering. They stand on concrete bases, are capped with concrete to protect wall-tops, and have been treated with a number of different substances

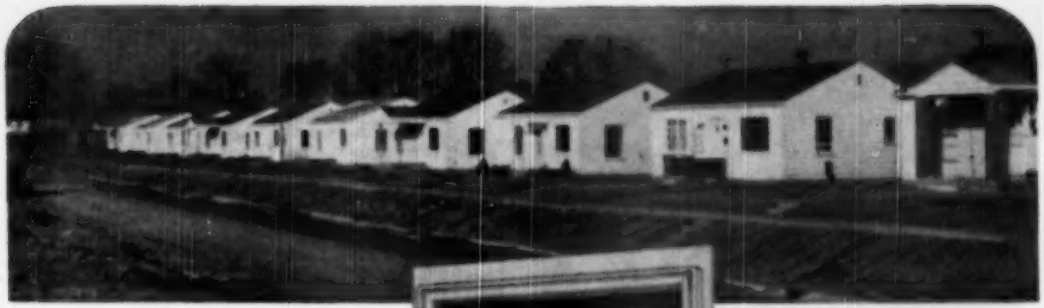
Already the Station has produced two new inventions to speed up pisé building. Methods of stabilizing the actual building material, as distinct from rendering the outside surface for protection, are for future study.

Though earth for construction is as cheap a material as could be imagined, and skilled labor is less necessary for pisé than for brick or other orthodox materials, the method is fairly slow, so the saving in the cost of actual materials is somewhat offset by the spreading of the wages bill over a longer period. Additional economy is gained, therefore, by speedier methods.

Traditional equipment used for rammed-earth construction is a wooden form placed in position on the foundation to mould a section of wall. Inside this mould the earth is tamped down until it is hard enough to ring with each blow.

The form resembles a long, low box with open top and bottom, the sides bolted together with long bolts. Completion of each section rammed is followed by the dismantling of this form, moving it along to the next section to be built, and rebolting it into its new position.

(Continued on page 188)



Bilt-Well Products bring greater comforts to Indiana home owners at lower costs

Above picture shows a part of one of Indianapolis, Indiana's newest housing projects being equipped throughout with Superior Windows and other Bilt-Well Woodwork.

The General Contractors are Behannon and Moore. Bilt-Well Woodwork is being furnished through Home Lumber Co., Danville, Ind., and supplied by Adams-Rogers, Indianapolis.

Specify SUPERIOR

UNIT WOOD WINDOWS

BILT WELL WOOD WORK

SUPERIOR WINDOWS SAVE TIME AND MONEY . . . they offer tremendous advantages in reducing building costs and in lowering maintenance expense.

SUPERIOR PATENTED WEATHERSTRIP . . . this is a completely weatherstripped unit. The exclusive jamb-liner equalizes all dimensional variations in the window and provides a weather-tight, snug fit at all times.

SUPERIOR WINDOWS ARE COUNTERBALANCED . . . overhead spring balances, guaranteed for the life of the building, insure easy, smooth sliding windows.

SUPERIORS ARE BUILT TO LAST . . . made of kiln-dried Ponderosa Pine with 1⅛" thick jambs and 1¾" thick sills, all of which is chemically treated with a toxic water repellent preservative to insure excellent stability.

SUPERIOR WINDOWS ARE IDEAL . . . the sash can be installed and removed while plastering and painting (during construction prior to setting "inside stops") without damaging the weatherstrip.

SUPERIOR WINDOWS ARE DISTRIBUTED THROUGHOUT THE 37 EASTERN STATES BY RELIABLE BUILDING MATERIAL DEALERS

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Bilt-Well Storm Sash and Screen Units are optional equipment, an investment, however, that pays large dividends year after year.

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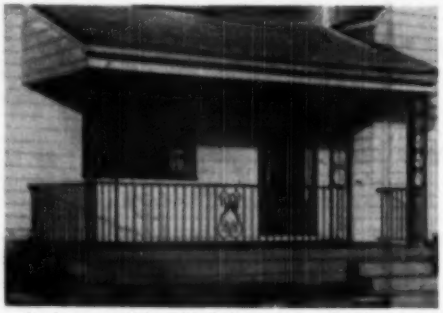
Throughout the nation wise builders are gaining lateral reinforcing for all masonry walls . . . brick, block or tile . . . with Dur-O-wal. Dur-O-wal is electrically welded to work fast on the job . . . unique design assures workman-like corners. For specifications and descriptive folder, write, wire or phone Dur-O-wal Division, Cedar Rapids Block Company, 644 12th Ave. S.W., Cedar Rapids, Iowa.

DUR-O-WAL
Patented STEEL Reinforcing
FOR MASONRY WALLS

Homes sell faster with

Art in Iron Ornamental Iron



And never did so little buy so much! Artcraft's Ornamental Iron "smartens" every type of home—small, large, modern, traditional. For the finest in ornamental iron work—from simple porch railings to intricate custom work—see your Artcraft dealer. Or write Dept. A for free folder, catalog and name of your nearest dealer.

ARTCRAFT
ORNAMENTAL IRON CO.
724 E. Hudson St., Dept. A, Columbus 11, Ohio

Rammed-Earth Building . . .

(Continued from page 186)

This process is repeated around the circuit of the wall to be built, and the partition walls as well. Then the form is erected on top of the built section, and so the ramming goes on until the requisite height is reached.

Removal of the form from one section to another is effected by withdrawing the bolts which go through from side to side and dismantling the formwork to be erected in position for the next section. This is difficult when the earth is rammed hard.

The Station has evolved a new type of form, the sides of which are retained in position by overhead clamps instead of through-bolts. Release of these clamps frees the sides of the form, which come away from the pisé without any trouble, and without leaving bolt-holes.

In addition, the new form is fitted with rollers to facilitate movement, without dismantling, from built to unbuilt section. One roller moves along the foundation or previously completed level of the wall, the other, at a higher point, moves along the top of the section from which the form is being released.

Because of these rollers, it has been named the "crawler-form." It produces a wall section 5 feet long and 15 inches high, compared with the 6 feet by 30 inches of the traditional form; but in tests the new form took one man eight minutes to change its position, compared with the 1½ hours which it took three men to dismantle and re-erect the traditional form.

The second invention to speed up building was a mechanical rammer to replace the manual rammer which has been used by pisé builders from time immemorial.

The basis for the new equipment was a pneumatic tamper designed originally to compact backfill for trenches, or tamp sand into moulds for heavy foundry work. It weighed 23 pounds, had a flat-faced circular, 2 pound hammerhead of aluminium, 3 inches in diameter.

At the Station the tamper was adapted by fitting instead a 10 pound flat-faced hammerhead 6 inches square. Rods were fitted to prevent rotation of the head; piston speed and pressure were reduced to the needs of its new task. The remodeled implement weighed 31 pounds.

Three men were put on each of two jobs of building test walls, one group with a manual tamper, the other with a pneumatic machine. The manual operators took three hours to build their wall, the pneumatic operators only 1½ hours. A production speed of 13 cubic feet a man-hour was attained.

Investigations showed that the mechanical rammer gave a wall of increased strength, produced a pisé of greater regularity and finer texture, and compacted it more densely.

For the guidance of the many inquirers about building in pisé, Middleton has published for the Station an interim report embodying information from British and American sources, supplemented by the Station's own experiments and information gained in areas of Australia where pisé building flourished.

"It will be seen," he writes, "that the rules followed are of the rule-of-thumb type developed over the years by trial, error and experience.

"Some effort will be made by the Station to develop soundly based rules capable of wide application for the choice and testing of soils and mixes and the determination of suitable water content.

The booklet contains many practical points of guidance, and quotes practices which have grown up in Australian pisé centers.

In Corowa, for example, builders keep window and door

(Continued on page 190)

CHASE COPPER TUBE RADIANT HEATING

goes into still another group of homes!

Coils of 60 and 100 foot lengths that eliminate extra connections—flexible, small-diameter tube that bends easily without special tools—solder-joint fittings that make tight joints . . . these are just a few of the reasons why builders all over the country are turning to Chase Copper Tube for their radiant heating installations.

The installation shown is in a group of 50 houses in the East. (Name furnished on request.) Chase Copper Tube was supplied by Meyer Malbin Co., Inc., Long Island City, N. Y.

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CONSTRUCTION MACHINERY CO'S.

Rammed-Earth Building . . .

(*Continued from page 188*)

heads at the same level, and construct a continuous reinforced concrete lintel completely round the building. To protect exterior walls, they "key" cement mortar rendering by scoring vertical and horizontal lines 6 inches apart all over the surface, sink conical holes at the intersections of these lines, then drive spring-head roofing nails into the holes until the heads are level with the wall surface. The plaster is forced behind these nail-heads when the wall is being rendered.

These are local practices. The report also lists many helpful points of guidance on pisé building generally, such as footings for the walls, width of the eaves, pitch of the roof, rendering materials.

Reinforced concrete strip footings are recommended as a base on which to build the walls. These should be carried up to a minimum of 9 inches above ground level to protect the wall against erosion by storm-water and rainsplash, and even higher where rainfall is exceptionally heavy and flooding is possible.

Walls should be 12 inches thick except for very large buildings and should be set on flexible damp-proof courses and capped with a moisture-resistant covering such as an inch-thick layer of portland cement mortar before the wall plates are placed in position. Lintels should be of reinforced concrete with a bearing surface of at least 9 inches on either side of the openings.

Under ideal circumstances, a good pisé wall, when hardened and matured becomes harder with age and some pisé walls have survived centuries of exposure. But the risk of damage for lack of an inexpensive waterproof coating is not worth while when there are inexpensive ways of rendering the exterior to protect it from water.

Cement mortar rendering is satisfactory, provided that it is keyed well to the wall. A cheaper method is to paint it with clear raw linseed oil or thin paint, brushed well in at a rate of a gallon to 100 square feet. Three days later a priming coat of ordinary house paint is applied, three quarts to 100 square feet.

Farm buildings, it is suggested, might be treated more economically with hot tar, a hot asphaltic-based solution, or cold bituminous emulsion. Lime washes, cement washes, lime tallow, waterbound paints and similar coatings are not suitable for exteriors because they do not give sufficient protection against moisture penetration.

Traditional pitched roof design is usual in Australia for pisé structures, except that eaves are made wider—3 feet to 3 feet, 6 inches—to give protection to the walls. Boxed eaves with ventilation in the soffit are recommended.

With such wide eaves, says the report, it is desirable to keep the roof pitch as low as possible, lest the eaves project too far down the face of the building and interfere with the natural lighting of the room.

The modern home at Baulkham Hills, already referred to, has been built with a flat roof; but here, too, a wide projection has been made to protect the walls.

Plumbing Indoors 50 Years

Although the prototype of the modern enameled cast iron bathtub was first made around 1870, the really significant progress in the plumbing industry has been made since 1900, the Plumbing and Heating Industries Bureau said in reviewing a half century of evolution in the plumbing industry. It was only in the last 50 years, the Bureau pointed out, that plumbing has moved indoors and the bathroom has won acceptance as an essential feature of a modern dwelling unit.

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By Everett Sanner
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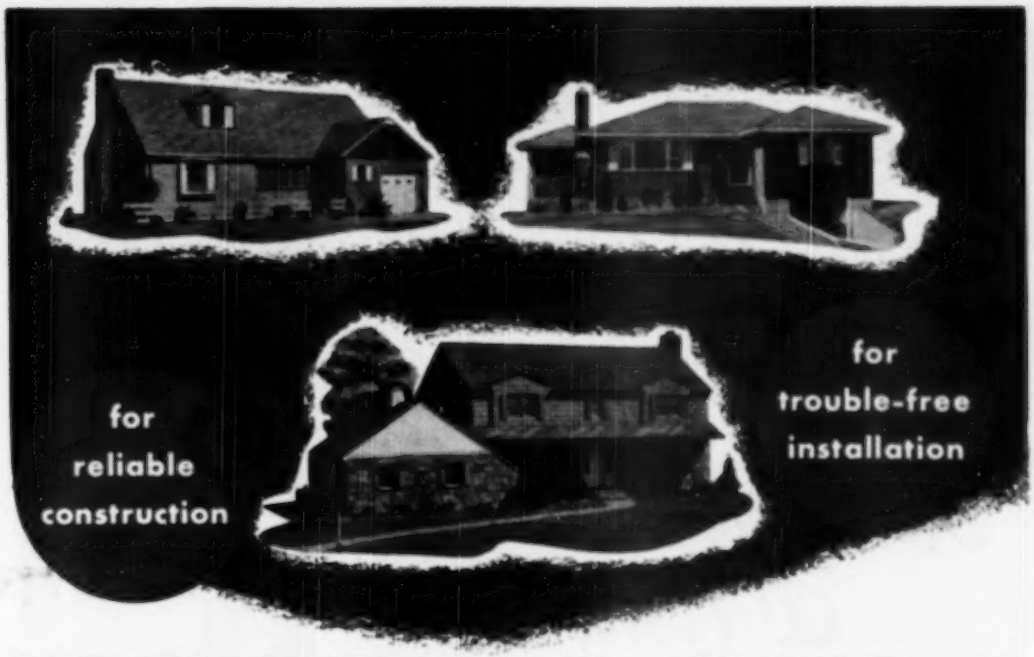

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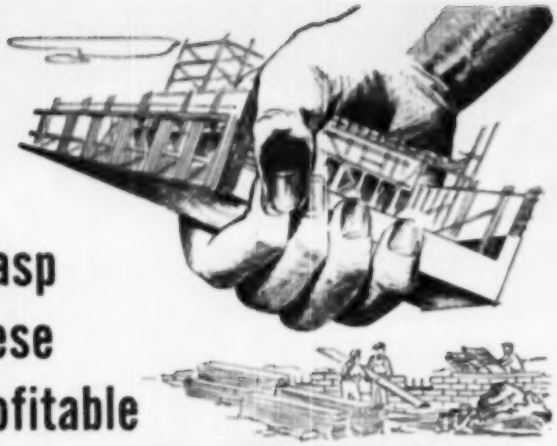

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INDUSTRY BRIEFS

L. Bushfield

C. H. FOULDS, **Perfection Stove Co.** vice president in charge of sales, has announced a revamping of the firm's sales division, with two major shifts in personnel. Named general sales manager is **Leslie Bushfield,** for the past year sales manager of the range and heater division. **Herbert C. Erhard,** who has headed the Acorn-Oriole sales division since it was acquired by Perfection last year, replaces Bushfield as sales manager in charge of ranges and heaters. The Acorn-Oriole division will be integrated with the Perfection range and heater division.

★ ★ ★

E. E. Nelson

Allied Building Credits, Inc., has opened a new branch office in Omaha, Neb., R. A. Peterson, president, announced recently. Named as manager of the new unit is **E. E. Nelson,** formerly of the Salt Lake City branch. Nelson has been affiliated with the firm since 1940, except for a period of service in the armed forces.

★ ★ ★

A. G. Sharp

Two organizational changes in the **Kimberly - Clark Corp., Neenah, Wis.,** were announced recently by the firm's sales vice president, John R. Kimberly. **A. G. Sharp** has been named general sales manager and **J. B. Catlin,** general merchandising manager. Sharp also acts as assistant to the vice president. Each has been associated with the corporation since 1930.

★ ★ ★

Three new appointments have been made by the **Insulite Division of Minnesota and Ontario Paper Co.,** M. C. Fairfield, Insulite sales manager, has reported. Named sales representatives were: central Indiana, Garth R. Marine; Montana, northern Wyoming and the western section of North and South Dakota, Chester B. Knapp, Jr. O. G. "Ollie" Norbeck has the territory in North Dakota and northwestern Minnesota.

WIND CAN'T PICK THESE "LOCKS"

DUBL-COVERAGE TITE-ONS are not just stronger and double thick—their patented design results in an amazing *double ply* roof — two roofs interwoven in *one* — with triple coverage in many parts. And for extra re-enforcement each interlocked shingle is nailed down solidly in four places. DUBL-COVERAGE TITE-ONS are truly wind proof!

INTERWOVEN APPLICATION

The man is holding a group of DUBL-COVERAGE TITE-ONS arranged just as they are applied on the roof (underside view). Note that the shingles do not come apart even when hanging vertically without nails! When interlocked and nailed down on the roof, they stay where they belong!

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TITE-ON Shingles are Ruberoid-originated and patented. They have an 18 year background of *proven performance.*

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Tite-Ons were specified for the Institute by Builder's, Inc. . . . but Tite-Ons really *sold themselves!* Mr. L. R. Mollohan, manager of the Rock Island Lumber Co. first sold Dubl-Coverage Tite-Ons to Builder's, Inc. for several Four-Plexs in Southeast Wichita. In June, 1947, these roofs were put to a severe test when Wichita had a very heavy windstorm that ripped up other roofs but failed to disturb Tite-Ons. Besides providing the utmost in storm protection, self-locking Tite-On Shingles are fire-resistant, attractive and provide a minimum of two thicknesses over the entire roof.

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BOOK REVIEW

A QUICK glance over book publishers' current lists indicates that there are today several hundred books on the market that in one way or another deal with the broad and fascinating subject of electricity. There are, in fact, just too many books on electricity, no matter how fascinating they are, for the average builder, contractor or carpenter to be able to judge intelligently just which one of these hundreds of volumes best suits his particular needs. As one way out of this dilemma, we would like to recommend a couple of popular titles, both of which are on the slim side, that have met with wide approval in the building trades. They seem to supply just the electrical information that the average builder is looking for.

INTERIOR ELECTRIC WIRING AND ESTIMATING

By Uhl Nelson Dunlap. Third Edition, 254 pages, illustrated. 5½ inches by 8½ inches. American Technical Society. $2.75. *No. 28 on adjoining column.*

First published a number of years ago, but today in its third up-to-date edition, this book is an old stand-by that has proved its worth beyond dispute. It is our guess that what builders like best about it is its easily understandable "how-to-do-it" style that simplifies the problems of house wiring and estimating not only for the beginner but also for the more experienced craftsman. Contractors especially will profit from that section of the book that tells how properly to estimate the labor and materials that will go into a house wiring job.

Other useful chapters contain a wealth of practical information on service wiring; knob and tube wiring; cable wiring, conduit wiring materials, tools, methods; and apartment and factory building wiring. All of which combine to make this both a fine text and ready reference book which we feel a builder can rely on with confidence.

WESTINGHOUSE HOME WIRING HANDBOOK

By A. Carl Bredahl. Second Edition, 134 pages, illustrated. 5¼ inches by 8 inches. Westinghouse Electric Corporation. $1.00. *No. 29 on adjoining column.*

It might be suggested that the company that publishes this little 134-page work on the fundamentals of electrical wiring has something more than a detached interest in the subject. The obvious answer is that if other suppliers went to the same pains to provide useful information to builders and consumers in the same handy fashion that the Westinghouse people have there is no question that both the companies and the users of their products would benefit considerably.

Here in eleven short chapters is excellent data on electrical equipment, outlets, circuits, control centers, circuit protection, communication systems that include signals, telephone and radio, specifications, estimating costs, terminology and tables together with a clear explanation of the company's own *Four Degrees of Electrification* which gives the builder a quick means of selecting a system of wiring that will satisfy a given installation.

This book is not an all-inclusive treatise on the subject of wiring nor is it intended to be. Rather it is a thoroughly useful guide for planning wiring of popular-priced homes, which is just the kind of information that most builders are looking for.

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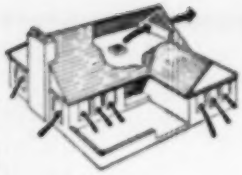

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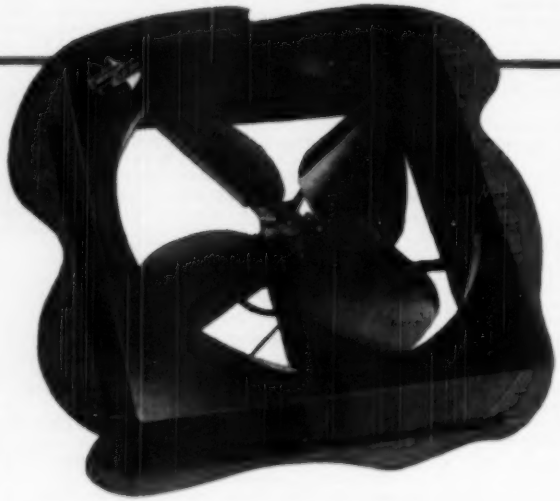
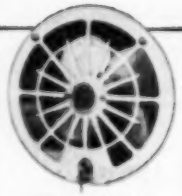
with EMERSON-ELECTRIC
Attic Fans



There's no mistaking the trend! Dependable, nationally advertised Emerson-Electric Attic Fans have *proved* themselves the effective, economical answer to the problem of summer comfort in the home! Fan-planning becomes a real *reputation-builder* for you . . . because the benefits are so obvious that your clients are quick to "spread the word." And remember, you save them *half* on installation costs, by installing an Emerson-Electric Attic Fan during original construction.

Emerson-Electric's *complete* line of Home Cooler Fans and accessories lets you select exactly what you need . . . assures unmatched performance, backed by 60 years of fan manufacturing experience. For complete data, refer to 1950 Sweet's Builders' or Architectural Files, or write for Bulletin No. 407.



SPECIFY EMERSON-ELECTRIC KITCHEN FANS

Please *her* with an attractive Kitchen Ventilator Fan . . . to whisk away heat, smoke, and cooking odors . . . prevent spread of greasy vapors to walls and drapes. Easy to install in any construction. Models for wall or ceiling installation.

The Emerson Electric Mfg. Co., St. Louis 21, Mo.

EMERSON ELECTRIC
MOTORS • FANS APPLIANCES

Low Upkeep . . .

(*Continued from page 158*)

at rear, and in constructing the kitchen cabinets. Two 1½-inch meat cutting boards are installed in the kitchen cabinet countertops which are Formica, as is the backpaneling above them.

A special cabinet next to the range in the kitchen encloses a serving cart. The underside of the cabinet above it

FIELDSTONE fireplace has oak mantel

holds a folding knife rack operating on friction hinges.

The china cabinet separating the kitchen and dining areas loads from both sides, as does the lower section, including the silverware drawers. Both kitchen and dining rooms are illuminated with flush fluorescent ceiling fixtures. The refractory table in the dining room was also built in the owner's mill.

The paneling in the walls and in the ceiling of the front porch are cypress as are the cabinets which are built into each side of the fireplace.

GRILL cabinet shelves are heatproof stone

One is a wood bin serving both the living room and the porch. The second outer cabinet encloses three drawers each on the porch side and on the living room side.

The living room fireplace is equipped with a Heatilator. The porch unit has a Handcock grill installed in it. The extended cabinet shelves and mantel of the porch fireplace are of flagstone so that hot uten-

(*Continued on page 200*)

Notice how *more* folks notice heatinq *more*?

She had been impressed by the modern kitchen. He had grinned as he surveyed the spacious recreation room. But, it was when both eyed the Bryant automatic gas heating installation that they knew *this* was *their* house . . . a quality home throughout!

In most every part of the land, there's growing excitement about automatic gas heating. It is the blooming of an idea which Bryant planted nearly a half century ago with installation of the first home heating truly designed to "let the pup be furnace man!"

Four modern factories now hum day and night to supply the demand for this famous equipment. Fifty distributors and thousands of dealers offer Bryant products in a selection unmatched by any other single brand.

Bet your bottom dollar that Americans want the *best* in automatic gas heating . . . the kind you give them when you specify or install equipment bearing the Bryant nameplate.

Let the pup be furnace man
. . . and enter boy, too!

bryant

AUTOMATIC HEATING

The most complete line of gas heating equipment in the nation

Bryant Heater, Dept. 252,
17825 St. Clair, Cleveland, Ohio

( ) Send me the new booklet that tells the Bryant story. ( ) Have your distributor call on me.

Name _____

Company _____

Address _____

City _____ State _____

PARANITE PARA-THERM
(TYPE RH BUILDING WIRE)

CARRIES MORE CURRENT PER DOLLAR OF COST

3/0 TYPE RH
Requires 2-inch Conduit. Maximum permissible operating temperature 59° C.

250,000 CM. TYPE R
Requires 2½-inch Conduit. Maximum permissible operating temperature 69° C.

Above examples are 200 amp. Circuit

Its higher amperage rating under the National Electrical Code affords greater current carrying capacity.

Smaller conductors, smaller sizes of conduit and fittings, and lower labor cost—all are available to you by proper application of Paranite Paratherm (Type RH) Wire and Cables.

All Paranite products are made under the watchful eye of S. Q. C.—Statistical Quality Control.

IF IT'S PARANITE IT'S RIGHT!

DISTRIBUTED THROUGH WHOLESALERS

PARANITE WIRE AND CABLE
Division of ESSEX WIRE CORPORATION
FORT WAYNE 6, INDIANA

Low Upkeep . . .

(Continued from page 198)

oils may be placed on them. Maple cutting boards are also set into this mantel. The living room mantel is solid oak, 2½ by 14 inches and 13 feet, 4 inches long.

As an inspection of the photographs and plans reveals, ceiling cabinets are numerous in this home. They are used in the utility room which also has a

SPRIGHTLY furnishings in green and yellow harmonize with warm tones of maple panels

maple work bench with cabinets below. This room also has a closet designed especially for storage of fishing rods and tackle, raincoats, and boots in addition to providing storage space for regular household items such as ironing boards and mops.

Both porches are screened and equipped with canvas covering that can be lowered instantly during inclement weather.

Furnishings in the living room are in colorful green, white and yellow. The kitchen is decorated with canary yellow. The wood panels were finished with a 50-50 white shellac solution, sanded, coated a second time, sanded and rubbed with steel wool to remove highlights, and finally coated with butcher's wax.

The floor of this house is slab concrete, 4 inches thick, poured over a 4-inch slab of a zonolite-cement mix. Two coats of Armstrong's asphalt cement, saturating a layer of 30-pound felt, bind the asphalt tile to the concrete floor. Four inches of zonolite also furnish insulation in the ceiling, finished in 16 by 32-inch NuWood panels.

A Coleman oil burning floor furnace with thermostatic controls, installed in the living room, heats the house.

The plans were executed by the National Plan Service, Inc. Gail H. Cole aided in designing the fireplace, bedroom, and kitchen. The builder was Vernon Barnes, Elk Rapids, Mich., who used general materials furnished by the Morrison Lumber Company.

IN-SINK-ERATOR
is the ONLY food waste disposer conceived and engineered by an Architect* to meet the exacting requirements of the building professional.

Note compact streamlined smoothness—no projections—so easy to keep clean.

Unlimited Capacity

Safe continuous feeding during operation eliminates stop-and-start nuisance where capacity is restricted in units which operate only when cover is locked.

Alternating Shredder

Exerts two-way cleansing, overcomes clogging, doubles life of shredder and provides self-sharpening action.

Write for catalog or see Sweet's files—24a. 16 Architectural—6b. 13 Builders

*John W. Hammes, Registered Architect . . . President, In-Sink-Erator (founded 1938).

IN-SINK-ERATOR MANUFACTURING CO.
RACINE, WISCONSIN

EARLY AMERICAN

Hardware and Lighting Fixtures

The Finishing Touch of Quality for Colonials, Ranch Houses, Game Rooms

Old Guilford Forge reproduction hardware and Early American lighting fixtures are now available to builders for use in homes where the "touch of distinction" is required. Not just another black iron line, Old Guilford Forge offers a complete complement of faithfully hand-reproduced hardware, with lighting fixtures in pewter, brass and wrought iron to match.

Despite their quality, Old Guilford Forge reproductions are sensibly priced — well within the budget of the moderate cost home. Custom work in ornamental iron and hardware is invited. Write for quotations.

Write for Illustrated Catalogue

Old Guilford Forge

33 Broad Street
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BASEMENT OR CLOSET DAMP?

NEW! IMPROVED!
SOLVAY
AIR-DRYETTE JR.
with SOLVAY CALCIUM CHLORIDE

absorbs moisture—the cause of rust, warping, mildew in workshops, darkrooms, closets, playrooms, storage rooms, vaults. Built to last for years. Big capacity. Works fast, absorbs up to 1½ quarts per day. Compact, inexpensive, clean, safe, odorless. Thousands in use. Write for booklet and name of your nearest dealer.

Dept. 34-S. SOLVAY SALES DIVISION
Allied Chemical & Dye Corporation, 40 Rector Street, New York 6, N.Y.

FOR FAST — ACCURATE SHEARING

the Pearson

ASBESTOS BOARD and SHINGLE CUTTER

Patented

The Pearson Cutter is a perfect tool for Asbestos Applicators, Contractors, Lumber Dealers. Simple to operate either vertically or horizontally. Cuts clean and fast on 1/8" asbestos sheets or asbestos roof and siding shingles. Sturdily built; weights 6½ lbs.; 24 inches long; has punch for shingles. Cutting blade and wearing parts of tempered steel. FULLY GUARANTEED.

Only **$7.95**

Send your order to
O. PEARSON MFG. CO.
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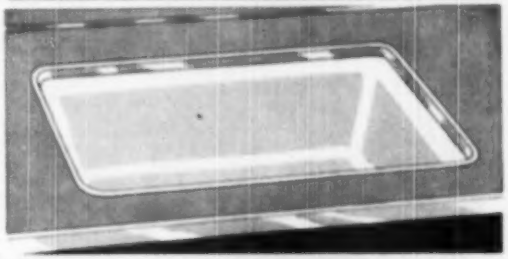
How to install the NEW CHROMTRIM fold-down type sink frame...



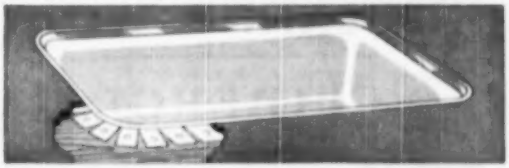
1. Align CHROMTRIM sink frame over opening. Embed it in Werneco waterproof adhesive and screw down permanently. Frames are pre-drilled with countersunk holes. Use screws supplied.

2. Cut covering material to fit over frame. Spread Werneco waterproof adhesive evenly over sink top and press or roll down covering material to smooth out all air bubbles.

3. Fold down lip over material, starting with wood block and hammer. Continue with block and hand pressure until adhesive squeezes out at edges. Clean off excess adhesive immediately.

CHROMTRIM preformed, fold-down frames are available in 13 popular sizes. Fold-down lip grips all covering materials ... makes tight waterproof joint on plastics, linoleum, etc. from 1/16 in. to 1/8 in. thick. Available with square back or tapered flanges. For extra beauty, finish outer edges of sink top with CHROMTRIM fold-down underface nosing.

How to form your own sink frames on the job



Use CHROMTRIM straight face nosing, edging or fold-down type nosing. Slit the flange or underface shapes as shown, to form rounded corners. Saw one slit only for square corners. Write in for complete information.

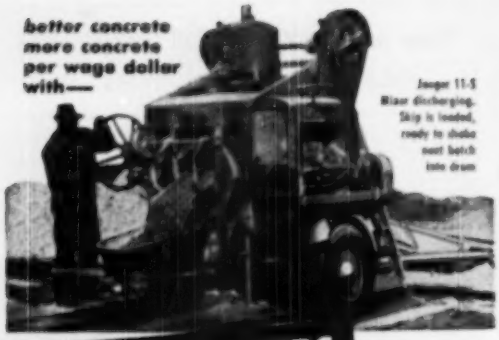
A complete line of over 200 metal mouldings, aluminum, some stainless steel. There's a CHROMTRIM shape for every need. See your distributor.

Chromtrim
METAL MOULDINGS
ALUMINUM—STAINLESS STEEL

Easy to Buy—Easy to Apply

R. D. WERNER CO., Inc., 295 Fifth Avenue, New York 16, N. Y.
In Canada: R. D. Werner Co., Ltd., Oshawa, Ont.

better concrete more concrete per wage dollar with—



Jaeger 11-S Mixer discharging. Skip is loaded, ready to shake next batch into drum

JAEGER MIXERS

Better concrete, because Jaeger mixing drums and blades give criss-cross, double-there mixing. **More** concrete per wage dollar, because Jaeger 6, 11 and 16-cu-ft mixers have famous Skip-Shaker Loader that shakes load into drum cleaner and faster, and the fastest discharging drum on the market. You pour more concrete, handle more jobs in the same or less time. Machined steel drum tracks. Timken-bearing carwheel-type drum rollers, mean longer life. Write for Catalog M-6.

3½S with Power-Shaker Hopper
You load it while a batch mixes — delivers 12 to 15 more yards daily.

THE JAEGER MACHINE COMPANY Main Office and Factory—Columbus 16, Ohio

PUMPS • COMPRESSORS • HOISTS • TOWERS

for a better job—

Use **INSULITE***

INSULATING WOOL

MADE OF
FIBERGLAS
T. M. REG. U. S. PAT. OFF.
MANUFACTURED BY
OWENS-CORNING FIBERGLAS CORPORATION

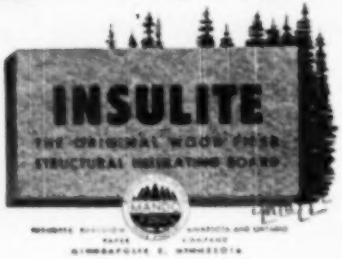
ROLL BLANKET

A permanent highly efficient glass fiber flexible insulation—competitively priced! Cannot burn, rot or decay. Quick, easy, economical application. With Insulite Insulating Wool, use Bildrite Sheathing and Lok-Joint Lath for quality wall construction and greater satisfaction.

POURING WOOL

BATT BLANKET

UTILITY BATT



*Reg. U.S., T.M.

$600,000 'Park and Shop' Center Being Built in Chicago Subdivision

SKETCH of "Park and Shop" center being built in Chicago

Construction was started recently on the first unit of a $600,000 "Park and Shop" commercial center with parking space for 400 cars in the Merrionette Manor development on Chicago's south side.

The shopping center will be the final unit in the four-year postwar development of the 542-unit duplex project by the J. E. Merrion Co. of Chicago. The subdivision was named a national winner in the 1949 NAHB land planning competition. Merrion said that the center, scheduled for completion next September, will be the first completely integrated and planned "Park and Shop" unit in the city.

The development will ultimately include a chain department store, a large food mart, bakery, drug store, variety store, hardware, dress, shoe and other shops and gasoline service station facilities. A feature of the initial unit will be a completely air-conditioned medical center with 11 suites.

Buildings for the commercial unit were designed by Raymond P. Gregori, architect. Site plans were prepared by William A. Dean, town planner.

Approximately 38,000 persons live within a two-mile radius of the shopping center. In addition, it is set back from and faces 95th St., a heavily-traveled arterial highway.

Participating in the ground-breaking ceremonies were Harley V. McNamara, president of the National Tea Co., which has signed a 10-year lease for a food mart; Alderman Emil V. Pacini of Chicago; and Teresa Giorgian, "Miss Chicago" of 1949.

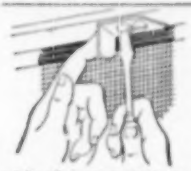
ON HAND for ground breaking ceremonies on first unit of the $600,000 "Park and Shop" commercial center in Merrionette Manor were (from left) J. E. Merrion, president of the J. E. Merrion Co.; Howard M. Landau of Landau and Perlman, rental agents; Teresa Giorgan, Miss Chicago of 1949; Raymond Gregori, architect; John Newberg, Merrion Co. construction superintendent; and William A. Dean, site planner. "Miss Chicago" spaded the first earth

KEYSTONE FRAMELESS TENSION SCREENS

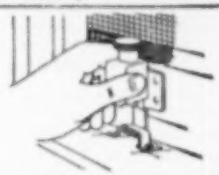
(ALL ALUMINUM)

Install screens this new modern *frameless* way and eliminate making and fitting screen frames, painting and outside hardware. You will not only save money but cut screen installation time to a minimum this modern Keystone way. Builders report savings up to 25 minutes per window and at same time have given home buyers the finest in insect screens. Write for new installation and measurement data and the name of nearest dealer today.

EASY TO INSTALL
★
NO RUST—NO STAIN
★



Round headed screw installed in top blind stop holds removable top bar bracket.



Catch at sill engages sill fixture. Note that fixture is easily adjusted for proper tension.

No Screen Frames to Make or Fit • No Painting • No Outside Hardware

KEYSTONE WIRE CLOTH CO., HANOVER, PENNSYLVANIA

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and

GET MORE TILE SALES THROUGH RENTAL CUTTERS

How Tile Dealers can give a complete rental service on tile cutters, can identify their stores with J. M. J. Tile Cutter Rental Service and increase their floor traffic. Over a year of actual testing at the retail level proves large sales increase due to rental cutters.

HELPS FOR YOUR NEW SALESMEN

Forms: Complete forms for handling J. M. J. Rental Plan.

Ad Mats: Free mat service for use in local promotion.

Point of Sale Displays: Eye-catching window and counter displays push the J. M. J. Rental Service.

The J. M. J. Tile Cutter Rental Service will be backed up by national publicity and advertising.

TILE CUTTER
MAKES YOUR HOME TILE JOBS *Easy*
RENTAL SERVICE

PROFIT FROM RENTAL

In field test, the J. M. J. Rental Cutter was out 90 per cent of the time. The J. M. J. Rental Plan outlines how you can profit from this demand.

HELPS CUSTOMERS

The J. M. J. Rental Cutter makes it simple for the customer to do an accurate and easy job of home tile laying. It helps the dealer show the customer how to do it.

CLINCHES SALES

Free use of the J. M. J. Rental Cutter helps to clinch sales. Goodwill can be increased by including free use of the cutter where the purchase warrants it.

SEND TODAY FOR FREE OUTLINE OF J. M. J. TILE CUTTER RENTAL SERVICE AND NAME OF NEAREST DISTRIBUTOR • DISTRIBUTORSHIPS AVAILABLE IN SOME AREAS • INQUIRIES INVITED

J.M.J. PRODUCTS CO. ENGINEERS MANUFACTURERS BELLEVILLE ILLINOIS

New right angle drive provides three speeds for Milwaukee drill

WITH right angle drive in low position, electrician drills holes in difficult spot for installation of electrical conduit

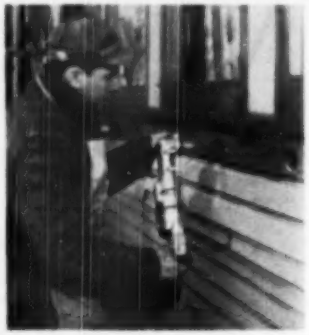
A new addition to the power tool field is a three-speed, right angle electric drill, manufactured by the Milwaukee Electric Tool Corp. and designed for drilling around corners, pipes, conduits, and other obstructions—and between 12-inch center joists.

The unit consists of a standard drill with a right angle drive attachment. This drive houses a versatile, integrated gear unit that boosts the chuck speed 50 per cent in one position and reduces the speed 44 per cent when this position is reversed. The drive fits six Milwaukee drills, models S-214, S-256, S-238, BF-312 (some exceptions), S-412, and S-212.

A special tri-speed kit is being marketed by the Milwaukee Electric Tool Corporation for contractors. The basic drill in this kit is the S-412 with a ½-inch chuck capacity and powered by a 115 volt, AC-DC, 60-cycle, ½ horsepower motor. The three speeds offered are 300, 450, and 675 rpm, 450 rpm being the speed of the basic drill. The variety of speeds makes the unit adaptable for drilling large or small holes in wood, ceramic, sheet metal, glass, and stone compositions.

The angle head is clamped to the electric drill with a sleeve, forming a solid, single unit. The drill and the angle head spindles accommodate any ½-inch-20 threaded Jacobs chuck or threaded bits. A sturdy side handle can be adjusted for right or left hand operation, or removed. Its 360 degree adjustment permits attachment anywhere on the exposed collar of the drill or on the right angle drive.

Turbine fans provide controlled ventilation throughout the aluminum housing of the drill. The triple gear train increases torque and protects the motor against overload. Ball and roller bearings reduce wear to a minimum.



CONVENIENT handles and special kit of RAD drill aid worker installing insulation in old home

USE *Bostwick*... SAVE ON LABOR AND COST OF MATERIALS

Bostwick Metal Casings are made of warp-proof metal, perfectly shaped for easy application around doors, windows and other wall openings.

Use of Bostwick Casing saves you time and money by eliminating tedious and unnecessary steps like sanding and wood finishing, and they are readily formed to perfect mitres.

Bostwick Casings result in a better finished job that's smoother, more spacious looking and much easier to sell.

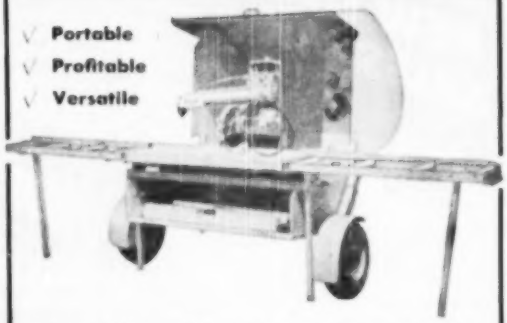
Best of all, Bostwick Casings actually cost less than wood — both in construction time and in cost of materials!

So don't delay. Consult your dealer today for complete information on Bostwick's entire line of easier handling metal lath and metal lath accessories.

THE BOSTWICK STEEL LATH COMPANY
183 HEATON AVENUE - NILES, OHIO

THE BUILDER'S SAW —ON WHEELS!

- Portable
- Profitable
- Versatile



Compare before you buy—for here is the *best money-making saw* for contractors ever built!

The Wallace No. 1 Radial Saw is specifically designed *for you*. It is *trailer-mounted, for portability. Exclusive angulator* for *rafter sawing* alternately cuts plate and plumb angles with *one* set-up and one handling of material.

High spindle speed gives *faster*, smoother saw cuts—better dadoing, shaping, rabbetting and cabinet operations.

Write for free bulletins—also inquire about our universal saws, jointers, bandsaws, shapers, mortisers, dowel-borers and other tools.

J. D. WALLACE & CO.
136 So. California Ave.
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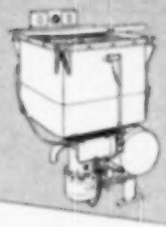
The Apex DISH-A-MATIC Electric Sink Model, combining sink and dishwasher in a beautiful, compact unit finished in white porcelain enamel with chrome-plated fixtures.

Apex DISH-A-MATIC Separate Cabinet for installations where a cabinet unit is more desirable.



Apex DISH-A-MATIC Drop-in Unit for simple installation in wood or metal counters.

The SOLD sign goes up faster . . . when your homes are equipped with

Apex DISH·A·MATIC

The *ONLY* Automatic Dishwasher that SUPER-HEATS its own water!

Home buyers know the DISH·A·MATIC as the *only* automatic dishwasher that SUPER-HEATS its own water. And you will be surprised how many are acquainted with the many other outstanding features of this automatic wonder that silently washes, rinses and dries a service for six, sparkling clean in 30 minutes or less. If *you* are not already employing this important aid to quicker, easier home sales . . . send coupon below for detailed specifications and special discounts or contact the Apex distributor near you.

HERE'S THE SECRET

Only Apex guarantees super-hot 180° germ-killing water at all times. The secret is this separate, built-in electric hot water tank made of Monel metal. Household water supply does not have to be boosted to dangerous temperatures.

Guaranteed by Good Housekeeping

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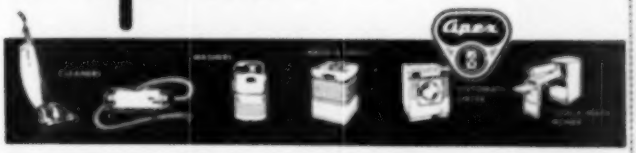
IT'S HERE NOW! America's finest disposer

No sorting required—the new Apex WASTE-A-MATIC disposes of all food waste at the same time, including any kind of bone that can be passed through the drain opening. And waste can be fed in continuously, while "Drain-Away Action" is pulverizing and flushing in one simple operation. Exclusive anti-jamming feature protects mechanism and house wiring. Available with complete DISH-A-MATIC Electric Sink (above) or can be installed in any sink with standard drain.

The Peak of Quality for 37 Years

Apex HOUR-SAVING APPLIANCES



THE APEX ELECTRICAL MANUFACTURING COMPANY · CLEVELAND 10, OHIO

THE APEX ELECTRICAL MANUFACTURING COMPANY
Dept. AB-1, Cleveland 10, Ohio

Please send descriptive literature, detailed specifications, and information on special low prices on Apex DISH-A-MATIC Units.

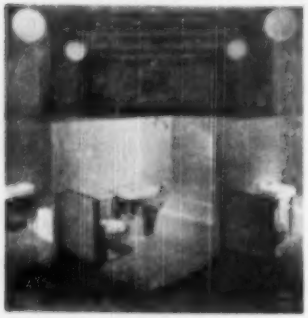
Name _____

Address _____

City _____ *County* _____

State _____

Kohler Co. Remodels New York Showroom



VIEW of Kohler showroom from outside

The Kohler Co. showroom, Long Island, New York, has recently been remodeled to include the latest developments in decoration and plan, with backgrounds built to simulate the walls and floor of bathrooms and washrooms. Each setting has been studied to offer a practical and interesting selection of background colors.

The showroom contains eight displays of bathroom and washroom sets in various price brackets. Four of the sets show fixtures in special Kohler colors—peachblow, spruce green, tuscan and cerulean blue. The remainder are in white with backgrounds in color.

On the balcony level is a display of Kohler enameled sinks on metal cabinets. These range in size from the large Wilshire with two basins and two drainboards to the single basin ledge-type Delafield. Boilers for home heating and electric plants for independent electric service are also exhibited on the balcony.

A section is provided where visitors may confer with architects and plumbing contractors. The showroom also houses the office staff of Kohler's New York branch.

Expand Facilities for Fabricating Log Buildings

Production capacity of the Brownlee Co. of Detroit, manufacturers of partially fabricated sectional log cabins, homes, camp and commercial buildings, has been doubled through expansion of three plants in Michigan, according to an announcement by the president, W. G. Brownlee.

Expansion of the Brownlee cabin and building division started late in 1948 with the purchase of two plants in Milan, Mich. These plants have been completely modernized and new facilities have been added near Houghton, Mich., where the firm has its own timber tracts, saw mill and log plant.

NEW BROWNLEE sportsman model cabin on lake in northern Wisconsin for summer occupancy by Chicago family. Size: 16x25 feet

The Brownlee line consists of a number of standard designs, starting with a 16x20-foot "Sportsman's Cabin" and including seven larger cabins and homes, commercial and club buildings and complete tourist and motor courts. All are built of white cedar logs, sawn through the center and factory-constructed in sections with doors and windows included. Knotty pine or other paneling interiors may be combined with the rustic exteriors.

In the design, half logs are deeply grooved to receive splines which join them in vertical panels.

HANSEN ONE-HAND TACKER

OVERHEAD is quickly reduced with the speed, balanced design and efficiency of the Hansen Tacker. One-hand automatic operation leaves the other hand free to hold and lock materials in place.

Widely used for all types of tacking and fastening—insulation, ceiling tile, metal lath, screens, building paper, etc. Send for details.

HANSEN A. L. HANSEN MFG. CO.

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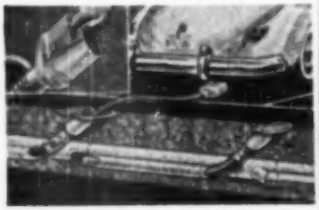
TO PREVENT THE POSSIBILITY OF POISONOUS CARBON MONOXIDE IN THE BUILDINGS YOU BUILD

Install "NATIONAL"

The Approved Garage Ventilation Equipment

Standardized engineering simplicity that lends perfectly to new garage buildings—efficiency, appearance, economy of installation and shop working conditions. The method of exhaust gas removal used by "National" is recommended by health departments, insurance companies, architects, building contractors and building codes in most cities and states. 4 different types of systems to choose from. Complete packaged units—ready to install. Nothing else to buy—low in cost.

Illustration shows sectional view of "National's" under-floor disappearing tube installation. Note that tube disappears without entering main trunk line—for balanced flow of air through main duct and perfect exhaust gas removal.



Write for complete literature and costs.

THERE ARE MORE "NATIONAL" SYSTEMS IN OPERATION IN THE UNITED STATES AND CANADA THAN ALL OTHER TYPES OF SIMILAR SYSTEMS COMBINED. LITERATURE AND FULL INFORMATION ON REQUEST.

THE NATIONAL SYSTEM OF GARAGE VENTILATION

World's Largest Manufacturers of Exclusive Garage Ventilation Equipment

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Silver Line

SAWS

SIX SIZES—BLADE CAPACITIES TO 12"

SAFER—EASIER TO HANDLE
FAR MORE POWERFUL!

1. SAFETY-LOCK SWITCH—positive protection against accidental starting.
2. EXTRA WIDE REENFORCED STEEL SAFETY BASE for better balance—easier to handle, safer to use.
3. LONG-SHAFT TRANSVERSE MOTOR MOUNTING transmits as much as 28% extra power, supports blade on oversize ball bearings from one side of the tool clear to the other.
4. UNIQUE SHOCK-ABSORBER GEARING harnesses the added power of these great new saws, gives extra life to motor, gears, spindle and blade.
5. PROTECTED DEPTH AND BEVEL SCALES. In plain sight when you use them—out of the way when you don't. Always accurate.

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AURORA, ILLINOIS

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For Free
Electric Tool
Catalog E-2

Belt Sanders
Bench Grinders
Drills
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Thor ELECTRICAL POWER TOOLS

ASK FOR THE Silver Line

BUY IT from your DISTRIBUTOR

You can really

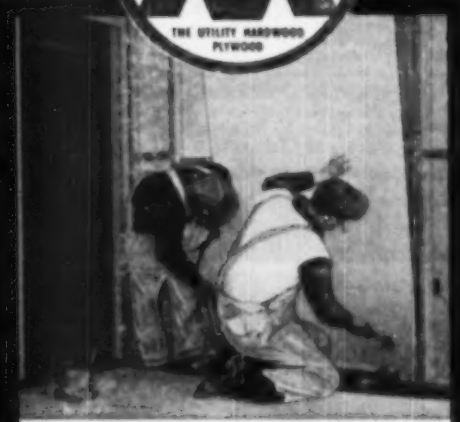
DO THINGS

with this versatile

HARDWOOD PLYWOOD!

Mengelbord

THE UTILITY HARDWOOD PLYWOOD



Here at last is a genuine *hardwood* plywood, free from the disadvantages of soft woods, yet *attractive* in price. It is *ideal* for dry-wall construction, built-in cabinets, furniture, partitions, store fixtures, etc.

Mengelbord* is a low-priced utility hardwood plywood available in standard stock panel sizes 1/4" thick, 5-ply. It is moisture resistant—recommended for a wide variety of interior uses.

Mengelbord has a one-piece face with no joints or oval patches. It is made from beautiful unselected White Gum (Tupelo) with the face grain running the long way of the panel for greater strength and better decorative effects.

It is smoothly sanded, free from grain-raising, warp-resistant, cuts and works cleanly.

Mengelbord is light in color and suitable for a variety of finishes: paint, stain, natural, or as a base for wallpaper.

Write today for samples and descriptive literature. No obligation, of course.

Where fine wood panels of Mahogany, Oak, Birch or Walnut are desired—ask for Mengelux. Literature on request.

Plywood Division, **The Mengel Co.,** *Louisville, Ky.*
*Reg. U. S. Pat. Off.

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CONTRACTORS!

COMPLETE NEW HOME PLANS

Have the advantage of perspective drawings and floor plans to show future homebuilders. Give your clients the opportunity to choose from these latest design plan books. Plans utilize builders newest cost cutting and latest construction methods. Complete working blueprints of 200 FHA approved homes are available.

Wide variety of contemporary and traditional designs styled for comfort, beauty and convenience. Includes starter homes, four- to ten-room home sizes—in ranch styles, modern design, Cape Cod and duplex plans.

Order 2 books for only $2.00 (one book for frame and one for block masonary construction). Then when you order your first set of working blueprints—4 blueprints included in set—$25.00 for frame construction, $35.00 for block construction—your original $2.00 investment will be credited to your order. Order books today—let these amazing plan books sell home contracts for you.

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Mixers — Pumps — Hoists — Dumpcrete Carts

ARCHITECT'S drawing of new McDonald offices and warehouse

New Suburban Building Solves Expansion Problem

Lack of expansion facilities and parking space in downtown building prompt Joplin, Mo., wholesaler to construct modern plant at city's edge

A YEAR ago when the A. Y. McDonald Manufacturing Co., Joplin, Mo., found itself in a situation familiar to many wholesalers located in downtown districts—insufficient expansion room and a parking problem as well—they solved the problem by erecting a large new building on the city's outskirts.

The new plant, which contains a spacious showroom and a warehouse with more than 35,000 square feet of usable space, is located just off a trunk highway, has a railroad spur on the property and provides parking space for nearly 100 cars and trucks.

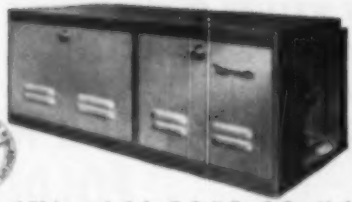
The showroom features bathroom and kitchen fixtures in homelike settings and serves as a planning center to which dealers are invited to bring customers who are building or remodeling.

The large warehouse space permits adequate storage of complete distributor's stocks, including power pumps, water supply systems, plumbing supplies, heating materials, mill supplies, building materials and farm and home equipment. In addition, it provides docking facilities for trucks of all sizes.

An open house and manufacturer's exhibit was held recently, which was attended by dealers, their families and customers.

NEW showroom features kitchen and bathroom equipment

Cuts Cost of Installing Automatic Gas Heat...



4 popular sizes...
40,000, 60,000, 80,000 and 100,000 BTU
10 Year Written Guarantee
Burns natural, mixed, manufactured and LP gas.

Pictured here is one of 82 homes built by C. B. Kelley & Co., Nashville, Tenn. Mr. C. B. Kelley, prominent builder, says—"We used 30 Norman Southerners in our Pleasant Valley sub-division last year . . . we are also using this equipment in our new Duncanwood sub-division of 52 homes.

"Our customers like the extra comforts and conveniences offered by the carefree, automatic operation of the Southerner . . . We are particularly pleased with the compactness of design which enables the Southerner to fit in so well with our building program."

This flexible, compact Norman Southerner fits in attic, under floor or basement, in utility room or closet. No floor space needed . . . requires less duct work . . . takes less time and labor to install . . . backed by the manufacturer's 10 year written guarantee and proven in thousands of Southerner installations in new and old homes.

Get the facts today on how to beat competition through low cost installation in new single and multi-unit home construction. Send for new folder "This Compact Forced Air Central Heating System Saves Valuable, Costly Floor Space."

Norman SOUTHERNER
Horizontally Designed Forced Air Gas Furnace

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MANUFACTURERS OF GAS AND GAS-OIL FURNACES AND CONVERSION BURNERS

COMING SOON!

Watch for Big Kwikset Announcement COMING SOON!

Look to Kwikset to be first and foremost with top quality residential locks.

Kwikset LOCKSETS

Kwikset Locks, Inc.
Anaheim, California

Save HALF Your Time

Measuring tread or riser

Marking board for perfect fit

Building Staircases

THE ELIASON STAIR GUAGE measures stair treads, risers and closet shelves, etc., in a matter of seconds. Saves You $20.00 to $30.00 on each staircase job. Gives you exact length and angle ready for marking. Each end pivots and locks at any angle. Length adjustable from 30" up. Fully Guaranteed . . . Only $12.95 cash with order, or C.O.D. plus postage. Order Today, or send for circular with reports from users.

DEALERS and AGENTS WANTED

Eliason STAIR GAUGE

ELIASON TOOL CO. • 2119 E. 56th Street • Minneapolis 17, Minn.

☐ Ship me —— Eliason Stair Guages at $12.95 each, Postpaid anywhere in U.S.

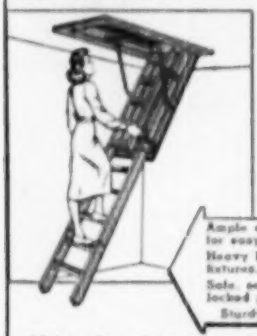
☐ $—— is enclosed. ☐ Send C.O.D. ☐ Send Circular

Name .....

Address .....

CAPITALIZE THE CUBIC FEET NOW WASTING IN INACCESSIBLE ATTICS

MAKE THE SMALL HOME LARGER . . . *On The Inside*



WITH THE

E Z WAY FOLDING STAIRWAY

Ample opening for easy entrance. Sealed air-draft construction when closed. Heavy hardware fixtures. Balanced action opening and closing. Safe, secure locked position. Soft-walk strips on all treads. Sturdy construction — dovetailed joints.

Makes downstairs rooms larger by eliminating built-in staircases, or permits additional closet space!

Gives accessibility to second floor space for extra bedrooms, dens, playrooms or storage!

Increases convenience, comfort, resale value.

Pulls down with a flick of the wrist when needed! Folds up out of the way with a finger-tip touch! Sturdy, stream-lined, modern as the day-after-tomorrow!

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MINNESOTA WOOD SPECIALTIES, INC.

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BUILDERS • CONTRACTORS

CUT COSTS With MULKEY'S All-Steel PORTABLE ELEVATOR It's Balanced

★ For bricks, blocks, mortar in buckets, sand, roofing, lumber, boxes, dirt, sacks, etc.

★ One man can handle and operate...easily trailed up to 55 miles per hour.

★ Clutch and Brake Assembly (own design)

Basic Length 24 Ft. • 17½ Ft. Maximum Lift
8' Extensions Available
Portable and balanced up to 48 Ft.

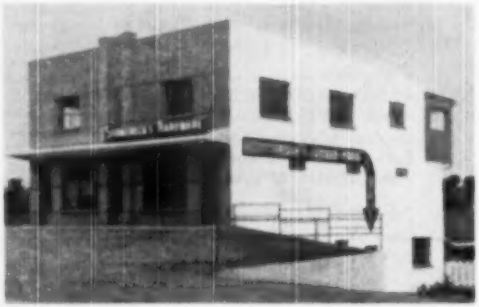
Write for FREE Literature and Prices!

SAM MULKEY COMPANY

1621-DD Locust Kansas City 8, Mo.

Colorado Lumber Dealer Doubles Business in One Year

New building for Scatterday company follows expansion

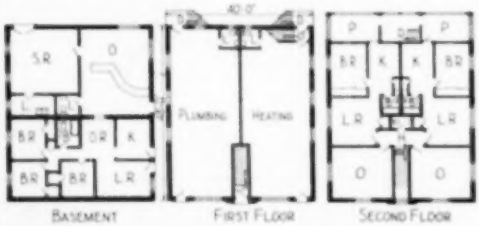


ABOVE right, the first office and warehouse of the Scatterday Lumber Company that now occupies the ground floor of new building above

BUSINESS of the Scatterday Lumber Company, 9605 West Colfax Ave., Lakewood, Colorado, increased 100 per cent during the year ending in mid-1949. This increase, ample assurance of continued success, led to the expansion of the lumber company and construction of new headquarters during the summer of 1949.

The multi-purpose building constructed by the lumber company has three floor levels. Since it is located on sloping terrain, the ground floor has openings on three sides. This ground floor contains the company's office, a display room, and living quarters. The first floor is occupied by two stores—plumbing and hardware shops. The second floor contains two apartments. The total floor space within the building is 6000 square feet.

The building is a kind of permanent display unit since



ADVANTAGE was made of sloping terrain in construction of Scatterday building. A variety of materials was used so that building serves as exhibit of lumber company's wares

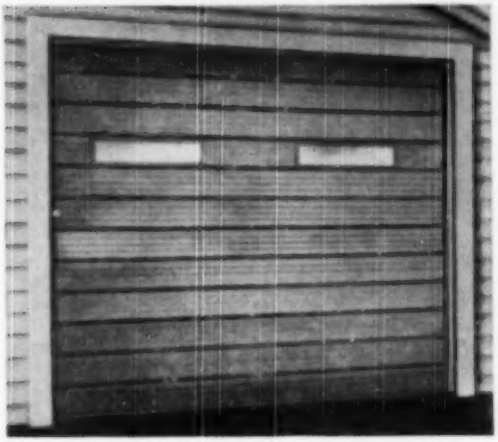
many samples of building materials were used in its construction. Each of the 24 doors in it is a unique sample, for example. Various types of flooring, brick, tile, and glass brick were also built into it.

Owner H. W. Scatterday, who is a member of the Moun-

(*Continued on page 212*)

ARCHITECTS & BUILDERS FIRE "RICHARD" . . . HIRE "ROLY" TO "OPEN THE DOOR"

Roly Does More For Less!



Because the sensational new MORRISON Roly-Door - the first and only four-sectional, all-steel overhead residential garage door—has *every* wanted feature . . . .
It opens the door to *everybody's* satisfaction!

The architect specifies the MORRISON Roly-Door because it conforms to all styles of architecture — because its beautiful simplicity is a welcome addition to new as well as old homes.

The builder chooses the MORRISON Roly-Door because it costs less to install . . . because it's individually packaged.

And the home owner is more than satisfied because the MORRISON Roly-Door costs less to own — and is built for a lifetime.

But that's not all . . . because no other overhead garage door has ALL THESE FEATURES:

- ★ Four-Sectional
- ★ Costs Less to Own
- ★ Costs Less to Ship
- ★ Costs Less to Store
- ★ Costs Less to Install
- ★ Low Headroom Bracket Welded at Factory
- ★ Trouble-Free (Patented Pend.) Hinging
- ★ Built to Last
- ★ Weatherproof
- ★ Completely Painted
- ★ "Touch-'n-Go" Operation
- ★ Quiet and Safe
- ★ Lock Keyable to Home
- ★ Minimum Field Assembly
- ★ Individually Packed
- ★ Conforms to all Architecture and Building Codes

Write for Bulletin D50-1-A

MORRISON STEEL PRODUCTS, INC.

ROLY-DOOR DIVISION

649 AMHERST ST. · BUFFALO 7, N.Y.

WITH

Canvas Awnings

Just one sunny summer is more than enough to prove the need for Canvas Awnings. Move your houses faster . . . the comfort, beauty and protection of Canvas Awnings are powerful selling points in a competitive market.

Your local canvas awning manufacturer offers a complete range of fabrics, colors, designs and hardwares.

THE CANVAS AWNING INSTITUTE, INC. and NATIONAL COTTON COUNCIL

"There is No Substitute for Canvas Awnings"

Contractors
Make Profits
With Shortcuts on

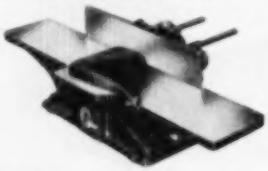
SHOPMASTER POWER TOOLS

SHOPMASTER 10" Tilting Arbor Saw

This compact floor model saw is built to give long dependable service and to speed work. It is easily transportable and can be moved right to the job. Large table and sealed-for-life ball bearings, plus rip fence, miter gauge, saw guard and base, all complete, less motor. (Zone 2) only $97.50

SHOPMASTER 6" Ball Bearing Jointer

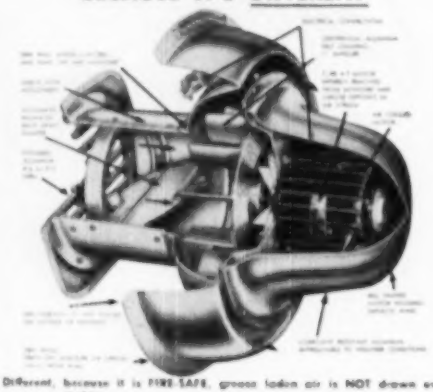
Another SHOPMASTER on-the-job tool that speeds work and saves you money. Advanced design of cutting head makes knife setting sure and accurate. Sealed ball bearings for long life. Fence locks in center to prevent twist. (Zone 2)..... $71.50



Write for complete catalog and price list.

SHOPMASTER, INC.
1213 Third St. So. Minneapolis 15, Minn.

HOME BUYERS LIKE THE
KITCHEN-AIRE EXHAUST FAN
BECAUSE IT'S *DIFFERENT*



Different, because it is FIRE-SAFE, grease laden air is NOT drawn over motor.

Different, because intake grill may be mounted above cooking range even on inside wall.

Different, because ordinary 6" stove pipe will serve for making connection between intake grill and exhaust fan.

Different, because it is QUIET, operating mechanism is mounted OUTSIDE the wall.

Different, because it is weatherproof, back draft damper protects against heat loss, operating mechanism is housed in corrosion-free aluminum.

Yes, the Kitchen-Aire is different. Electrically operated, easily installed, the Kitchen-Aire adds that plus-value which makes new homes salable. It is the last word in Kitchen ventilation, a feature your buyers will like. Underwriters Approved. Advertised in Better Homes and Gardens.

STEWART MANUFACTURING COMPANY
3204 E. Washington Street, Indianapolis, Indiana

(Continued from page 210)

tain States Lumber Dealers Association, established his business in Lakewood three years ago in a small shed that served as a warehouse, office, and display room. Formerly, Scatterday was a sawmill operator, an occupation that prepared him for his succesful venture as a lumber dealer.

This lumber yard functions as a family affair since Mrs. Scatterday serves as office manager. The Scatterdays' son, Harold, is the company's home planner.

The yard now operates two trucks and employs two men. Roy Barlow is the yard foreman. Further expansion plans are now being developed. These include a new lumber shed and a warehouse on the site of the present office.

The building was constructed by the Stonebeck Construction Company, also of Lakewood, Colorado.

H. W. SCATTERDAY, Sr; Mrs. Scatterday; Harold Scatterday, Jr; Don Manning; and Roy Barlow greet customers in new office

Plywood Product Approved in N.Y. Tests

Plyscord, a utility Douglas fir plywood, has been approved for use as exterior sheathing and as a subflooring and roofing material by the Board of Standards and Appeals, New York City, Vernon Sears, staff architect, United States Plywood Corp., has announced.

Plyscord sheathing is produced in a minimum thickness of 5/16 inches and is made of three plies of Douglas fir, with the grain of the center ply running at right angles to the two surface plies.

Plyscord for subflooring is made in thicknesses of 3/8, 1/2, 5/8 and 3/4 inches. The 3/8-inch is made of three plies and the other thicknesses in five plies.

The tests were made at Manhattan College under the direction of the Board of Standards and Appeals.

Hard Board Suitable for Exteriors

A new weather-resistant hard board, suitable for exterior building, is made possible through a plastic treatment adapted to hard board manufacture, according to Harold A. Miller, president of Forest Fiber Products Co., Forest Grove, Ore.

Called "treated" Forest Board, the new material utilizes selected Douglas fir fibers in the same controlled process as the standard grade Forest Board. During the manufacturing process, the plastic treatment is given to each fiber, and after the board is formed an additional surface treatment is given.

Besides furnishing water resistance, the plastic treatment provides greater structural strength, wear resistance and an added advantage in its resistance to soap or alkali, Miller stated. He said that the new board resists chipping, denting and breaking and, like standard hard board, is grainless so that it will not splinter. In the manufacturing process a hard, glassy surface is produced that takes any type finish by spraying, baking or brushing.

The "treated" hard board is being produced in sizes of 4x1-feet to 4x16-feet and in thicknesses of 1/8, 5/16 and 1/4 inches.

NEW welding technique builds STRONGER, more SILENT HOLLOW STEEL DOORS

CELLULAR CONSTRUCTION

VERTICAL INTERNAL WELDING

MAKES . . . USF

HOLLOW STEEL DOORS

★ MORE RIGID
★ MORE SILENT
★ MORE EASILY HUNG
★ ALWAYS PLUMB
★ ALWAYS SQUARE
★ ALWAYS ACCURATE

Selected for the nation's SIX largest projects.

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UNITED STEEL FABRICATORS, INC.
WOOSTER, OHIO

THE BEST FOR LESS!

when you install a

Bilco

TRADE MARK

Copper-Steel CELLADOOR

Modern design, finest materials, top craftsmanship make the Celladoor vastly superior to ordinary, old-fashioned wooden basement doors. There's simply no finer door made . . . at any price!

SAVES YOU TIME LABOR, MONEY!

You can install the Celladoor in as little as ten minutes . . . as pleased builders everywhere can testify. And there's nothing to go wrong. No breakdowns, repairs, or maintenance for your customers.

SATISFIES YOUR CUSTOMERS KEEPS THEM SATISFIED

The Celladoor opens the way to new living pleasure! And it keeps giving pleasure for a lifetime. It's super-safe, fool-proof, weather-tight, fire-proof, and flatters every home. Bilco performance means happy customers . . . better business for you.

THE BILCO CO., 165 Hallock Ave., New Haven, Conn.

Please send me all the facts that prove the "best costs less" when I install Bilco Celladoors.

Company Name _____ ☐ Architect
Address _____ ☐ Builder
City _____ Zone _____ State _____ ☐ Dealer

Pneumatic Nailer Used Effectively in California

A portable, pneumatic nailing tool is being used very effectively by a North Hollywood contractor, Winchell Brothers, according to L. A. Winchell, head of the firm. Called the Azor Nailer, the tool is manufactured by the Azor Products Co., Los Angeles. Distribution in the area is by the Atwood Machinery Co., Los Angeles.

TRIGGER releases driving mechanism

HOPPER holds approximately 600 nails

The Winchell firm, in addition to a general contracting business, handles carpentry subcontracts on large single-family or multiple housing projects, and uses power tools extensively.

Use of the pneumatic nailer was begun about six months ago. Winchell said that about 500,000 feet of flooring has been applied with two of the tools at about one-third of normal nailing cost, and that the tools paid for themselves on one big apartment project.

The tool operates by compressed air, requiring 12 cubic feet of air at 90 pounds of pressure. Builders using only one nailer can utilize a 17 cubic foot portable compressor. Winchell has a 40 cubic foot compressor which, besides the two nailing tools, operates spray guns, pneumatic hammers and spades.

The nailer weighs about 30 pounds when loaded with nails. At the bottom there is a stirrup into which the operator slips his right foot; and after driving a nail he lifts the machine with his foot to the next nailing position. A trigger starts the driving mechanism.

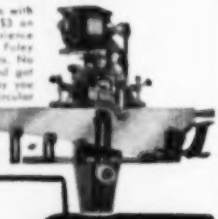
The hopper is loaded by throwing two or three handfuls of nails in at random, the nails automatically reaching the proper position. Capacity is about 600 8p nails. The tool is used mainly for nailing subfloors, but can be used for any flat work or on roofs where a man can safely stand.

New National Homes Plant

Negotiations were recently completed for leasing a former Army reconsignment depot at Horsehears, N.Y., to National Homes Corp., Lafayette, Ind. The building, owned by Webster Industries, Inc., has 175,000 square feet of floor and shipping space. National Homes expects to begin operations around April 1.

Make $20 to $30 a Week Extra
FILING SAWS

Turn your spare time into CASH—sharpening saws with a Foley Automatic Saw Filer pays up to $2 or $3 an hour. Start in your basement or garage—no experience necessary. The first saw I sharpened with my Foley Filer came out 100%. —writes Clarence E. Parsons. No canvassing—I advertised in our local paper and got in $3 saws. —says M. L. Thompson. With a Foley you can file all hand saws, also band and cross-cut circular saws.



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Send FREE BOOK "Independence After 40"
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The SLIDE-A-FOLD
DISAPPEARING ATTIC STAIRWAY

- - - A handy, practical and LOW COST way to reach the valuable storage space of the attic.

- COMPLETELY ASSEMBLED
- EASY TO INSTALL
- LOOKS GOOD
- SUPERIOR CONSTRUCTION
- REQUIRES SMALL SPACE
- LOW IN COST!

Low freight rate — Weight 65 pounds
WRITE TODAY FOR FULL DETAILS
CRAIG WOOD PRODUCTS COMPANY
BRENNAN ROAD COLUMBUS, GEORGIA

Jiffy
SAWHORSE BRACKETS
SET UP OR TAKE DOWN WITHOUT NAILS OR BOLTS
2" x 4" FOR LEGS

2" x 4", 6", 8", 10" and 12" FOR CROSS BAR

Timesaver for contractors, builders, painters, paper hangers.
COLORFUL COUNTER DISPLAY PACKAGE SELLS
Display it on your counter. Retail $1.50. Slightly higher in West. Order from your jobber or direct from us.
$1.50
GRAND HAVEN STAMPED PRODUCTS CO.
GRAND HAVEN, MICHIGAN

USE BOSTROM LEVELS
They Satisfy, Give You Precision and Save You Money.

No. 5 BOSTROM Convertible Level (Detachable Compass when desired)

Carried in stock by distributors from coast to coast. Write for free booklet and name of our distributor near you.

Simple, Accurate, Durable, Complete

No. 4 BOSTROM Contractors' Level

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538 Stonewall St. ATLANTA, GA.

3 WAYS TO OFFER "OVER-THE-TOP" CONVENIENCE

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● You can furnish "Over-the-Top" Door Equipment for practically any size or type of door . . . mill made or carpenter built. Doors can be architect-designed to harmonize . . . a real advantage for the homes with attached garages. On remodelling jobs old swinging type doors can easily be converted at modest cost.

SECTIONAL TYPE

● Frantz, the leading manufacturer of one-piece "Over-the-Top" Doors, now offers a sectional-type door with new design advantages. Frantz experience has produced a door 14 ways better . . . one that can be installed more quickly and easily. Available in two popular sizes: 8' wide x 7' high, and 9' wide x 7' high.

ONE-PIECE UNITS

EQUIPMENT AND DOOR COMPLETE

● Available in a variety of sizes, wood or aluminum construction, Frantz one-piece Door Units lift automatically when handle is turned . . . are powered by famous "Over-the-Top" equipment. *Require only 2" headroom.* Pre-bored bolt holes and simplified design cut time and labor costs.

Write for full details on the complete Frantz line.

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GUARANTEED BUILDERS HARDWARE

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

for positive – smooth

Gliding Action

Hidalift

THE 100% CONCEALED SASH BALANCE

Hidalift balances operate on a counter-balanced principle that assures quiet and positive gliding action. This is made possible by the fine quality coil spring and scientifically designed twist of the spiral track. A self-centering brass follower guide bushing keeps the free-floating steel tube centered in the sash to prevent jamming and helps maintain perfect window balance.

These are just a few of the many exclusive features that make Hidalift the finest mechanical sash balance on the market. Send today for complete information and prices.

Two Types of Attaching Brackets

Hidalift balances are available in either the "Cup" type or the "L" type attaching bracket.

QUALITY PRODUCTS FOR OVER A CENTURY **T&S**

HIDALIFT DIVISION
The Turner & Seymour Mfg. Co., Torrington, Conn.

Gentlemen:

☐ Send complete literature and prices on Hidalift

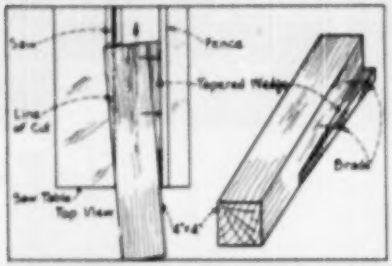
Please check ☐ Dealer ☐ Builder

Name _____

Address _____

City _____ Zone _____ State _____

How to Taper Lumber on a Saw Table

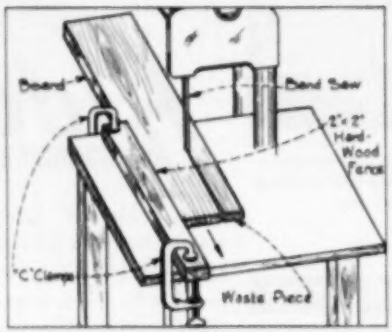


THIS job can be done quickly and easily by using a long tapered wood wedge. Nail the wedge on one side of lumber using thin brads. Adjust the saw table fence, and the lumber with the wedge is fed forward in the usual manner with the wedge riding against the fence.—Herbert E. Fey, New Braunfels, Texas.

HOW TO DO IT • HOW TO DO IT • HOW TO DO IT • HO

How to Make Fence for Band Saw

WHEN boards need to be ripped and only a band saw is available, the above method can be used. Secure a straight piece of hardwood and fasten in place with two C-clamps. This serves as a temporary fence and strips of various widths can be cut quickly by merely moving the hardwood piece in or out to the proper distance from saw.—Herbert E. Fey, New Braunfels, Texas.



May Designated 'National Water Systems Month'

More than two tons of printed matter will be sent to electric water system dealers to help them capture sales during and after National Waters Systems Month in May, according to the National Association of Domestic and Farm Pump Manufacturers.

Display streamers, envelope stuffers, merchandising booklets and direct mail sales aids were sent prior to observation of the week. The campaign is especially directed to the sale of new water systems for the 600,000 farms electrified in 1949, and to promote pump and tank sales for the farms which already had electrical service.

Association officials said that economic conditions are favoring water system dealers again this year, since farm income, although expected to be down by 11 per cent, will still be more than two and one-half times the 1939–40 level. All-time high for farm income was in 1949 with farmers taking in $35 billion. Farm income is expected to exceed $29 billion in 1950.

Slogan for National Water Systems month will be "Profit Grows When Water Flows." Keynote of the dealer sales aids will be "Running Water—Heart of Today's Living."

New BEVIL & DEVIL ALL PURPOSE SET for

NOW AVAILABLE—the tools you need for insulation board jobs. Sharp, strong, specially ground blades cut through toughest insulation boards leaving clean, smooth edge. Three tools—five blades—attachments. All for . . .

$5.85
Sent postage paid anywhere in U.S.A.

Extra Bevil-Devil Blades, of selected steel, ground to cut insulation board. Package of 100 for $4.00, postage paid.

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1629 SYCAMORE ROYAL OAK, MICH.

FOR BETTER CONTROL of product or process...

Whatever the CONTROL problem, in heating, refrigeration, aircraft or industrial processing, there's a better solution at General Controls. For better control, for faster results, check with any of the 22 General Controls Branch Offices.

22 BRANCH OFFICES ...to serve you faster!
Baltimore 5, Buffalo 3, Cleveland 15, Detroit 8, Kansas City 2, New York 17, St. Louis 12, Birmingham 3, Chicago 5, Dallas 1, Glendale 1, Minneapolis 2, Philadelphia 23, San Francisco 7, Tulsa 6, Boston 16, Cincinnati 2, Denver 4, Houston 6, Newark 6, Pittsburgh 22, Seattle 1

GENERAL CONTROLS
801 Allen Avenue Glendale 1, California
Manufacturers of Automatic Pressure Temperature Controls for Gas Systems

Need a Chimney?

VAN-PACKER PACKAGED CHIMNEY

Meets FHA requirements

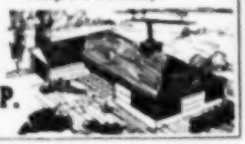
BUILDERS

• SAVE MONEY
Costs up to 50% less than brick.

• SAVE SPACE
Hangs from ceiling or below joists. Use space underneath.

• SAVE TIME
Install in 3 man hours or less.

• AVOID JOB DELAY
Immediate delivery to job of complete chimney.



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136 S. Clark St., Chicago 3, Ill.

PRECISION folding stairway

- No springs—Actuated by counterweights
- Easy to operate
- Safety treads on steps
- Insulated door panel
- Requires no attic space
- Shipped in one package

Write for full information
PRECISION PARTS CORP.
Nashville 7, Tennessee

PORTER-CABLE

Speedmatic

Portable Saw and Radial Arm

Combination — *complete, only* $313

- Saves the cost of two separate saws
- For all maintenance and construction work
- Portable saw attaches to arm in a moment
- Makes every kind of cut with positive accuracy
- Quick, easy adjustments for bevels and depths
- America's finest precision power saw

Speedmatic Portable Saw—A powerful high-speed saw, beautifully balanced for easier handling, faster sawing. Light, compact, makes accurate cuts in any position. Cuts job time way down, eliminates fatigue. Four sizes for cuts 2½" to 4¾" depth.

Model K75 (2½" Cut) $123.

Speedmatic Radial Arm—Above portable saw attaches quickly and firmly to arm. Retractable arm has long smooth stroke, 23" crosscut capacity, swings 45° right or left. Includes ask, table and fence, rugged steel base with legs. Four sizes for above saws.

Model for K75, Complete—$190.

See the Speedmatic at leading Mill Supply, Hardware or Lumber dealers. Write for complete catalog and name of dealer nearest you.

PORTER-CABLE MACHINE CO.
3025 N. Salina St., Syracuse, N. Y.
Makers of Speedmatic and Guild Electric Tools

In Canada write: Strongridge Ltd., St. Catharines, Ont.

This fine soft wood is one of the Associated Woods produced by member mills of the Western Pine Association. It is fine-textured, and although light in weight, is very strong for its weight. Carpenters like it because it is easy to work, nails without splitting and holds nails and glue firmly.

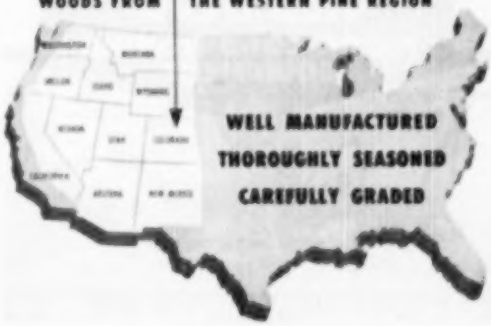
Engelmann Spruce is suitable for many building uses such as sheathing, subflooring, framing, ceiling and siding. It works up satisfactorily for interior finishing, mill work, industrial boxes and crates. The tight knotted boards are often used for knotty paneling particularly where a wood of light color and rather inconspicuous knots is desired.

For more information about Engelmann Spruce, send for free illustrated Facts Folder and Grade Use Guide. Address
WESTERN PINE ASSOCIATION
Yeon Building • Portland 4, Oregon

THESE ARE THE WESTERN PINES — Idaho White Pine, Ponderosa Pine, Sugar Pine

THESE ARE THE ASSOCIATED WOODS — Larch, Douglas Fir, White Fir, Engelmann Spruce, Incense Cedar, Red Cedar, Lodgepole Pine.

WOODS FROM THE WESTERN PINE REGION



Conveyor Made by Roofer Proves Worth Project

A conveyor made by a local roofer has proved to be a valuable piece of mechanical equipment for the H. F. Nunn Co., West Los Angeles, Calif., roofing contractors. The machine, which will raise 14½ tons of material

CONVEYOR in action on project. Machine is capable of lifting 14½ tons per hour

an hour to a three-story height, is being used on a large 608 project.

The conveyor is made of a steel-tubing ladder which is fastened to the roof with a bracket. A 7 HP motor is attached to the bottom. A cable runs from a spool attached to the motor up the underside of the ladder to a pulley on the topside. The pulley is attached to a carrier which is built to travel up and down the ladder rails on wheels.

A clutch engages the cable and at the same time releases the safety brakes. When the load is dumped at the top, the carrier goes to the bottom by gravity. By attaching a hopper, it can be converted to a gravel loader.

Asso. Releases Data On Nailing Hardwood Floors

In many cases, insufficient attention is given to proper nailing of tongued and grooved hardwood floorings; and with improper nailing there is every chance that some tongue splitting will result, according to a statement by the Maple Flooring Manufacturers Association. When this happens, the statement said, squeaks or creaks are likely to develop, because flooring strips fail to hold down and together as tightly as they should.

"The position of the nail point and the angle of the nail are all important. For effective results, nails should be driven at an angle of 45 to 55 degrees, and the first nail or two driven into the strip of flooring should be 'toe-nailed' toward the preceding strip to which it joins. This procedure makes tight end joints. Use heavy flooring hammer and set nails, breaking joints as the flooring is laid.

"The spiral type of floor screw is gaining in popularity in many sections of the country, especially when used in laying Northern Hard Maple flooring. It drives like any other type of nail, but turns and holds like screws. Experienced floor-layers using the spiral floor screw report little or no tongue splitting, bending or waste.

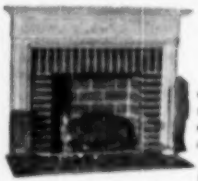
"The recommended nail specifications follow:

"For ¾-inch flooring.—Use fourpenny cut steel flooring nails or 1½ No. 1 spiral floor screws, driven nine inches apart.

"For 25/32-inch flooring.—Use 6, not over 7-penny cut steel flooring nails or 2¼ and 2½ No. 5 spiral floor screws, driven not over 16 inches apart.

"For 33/32-inch flooring.—Use not over 7-penny cut steel flooring nails or 2¼ and 2½ No. 5 spiral floor screws, driven 12 or 16 inches apart.

"Wire casing nails may be used where cut steel or spiral floor screws are not obtainable. Use only non-splitting type wire nails, and nail to each support bearing."



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(Reg. U.S. Pat. Off.)
FIREPLACES

Lends unsurpassed beauty and charm to homes—old and new. The modern fireplace that fulfills all modern day requirements—used with gas or electricity.

Large variety of attractive models in brick, stone, wood, etc., available. Furnished complete—ready to be installed in hour's time of handy man—shipped anywhere.

DEALERS, BUILDERS and HOMEOWNERS write for catalog and full information.

THE READYBUILT PRODUCTS CO.
1705-23 McHenry St. Baltimore 23, Md.

SALES REPRESENTATIVE WANTED

by established manufacturer of finest quality entry and interior bore-in door locks in low price range. Line has immediate recognition and acceptance. Want Commission Representative with building material or hardware experience. Desirable to have contacts with wholesale jobber and contract dealer trade. Several desirable territories available. State full particulars first letter. Confidential. Write to WESTWOOD MANUFACTURING CO., 1420 So. Evergreen Ave., Los Angeles 23, California.

Red Devil
FLOOR CONDITIONING EQUIPMENT

RED DEVIL TOOLS. IRVINGTON 11, N. J., U. S. A.

INCREASE PRODUCTION 100%
with KEN Corner LEVEL

In 15 minutes you can therefore the amazing savings in time and effort constructing corners, window openings, and doors, in all building. The **NEW KEN CORNER LEVEL** is the greatest improvement since the original invention of the level. It will double present production during any 15 minute period of working time. Multiply that saving by the number of 15 minute periods in a working day then you will know what kind of production increase you can expect with more accuracy and less effort. With the **KEN CORNER LEVEL** the mechanic working at the same speed will install twice as much material over the old fashioned wood level, because, it plumbs and squares **TWO** sides of a corner at **ONE** time. The "Z" bars form a "jig" that fits each corner brick in place, plumbing and leveling all sides, corner, and top, with a single movement.

The bubble is adjustable for plumbing a batter, incline, or sloping surface. Level sizes 18", 24", 36", and 48". **KEN CORNER LEVELS** are being successfully used by builders, masons, and carpenters, everywhere. **DROP** Post Card for information.

SINGER-KENNEDY CORP.
Dept. L—21 S. Van Buren St., Chicago 3, Ill.

NOW LAWSON BATHROOM CABINETS BONDERIZED AFTER FORMING!

BONDERIZED *AFTER FORMING* is an important new feature added to all Lawson Bathroom Cabinets! The bonderizing process is applied AFTER all shearing, drilling and forming is completed. It provides 100% BONDERIZED protection against rust and corrosion . . . assures longer life for all Lawson Cabinets!

AND . . . Lawson Cabinets, BONDERIZED *AFTER FORMING, cost no more!*

ARCHITECTS SPECIFY LAWSON BATHROOM CABINETS . . . BECAUSE they have: *one-piece drawn steel body,* stainless steel hinge and shelf supports, first-quality mirror . . . and now, they are BONDERIZED *AFTER FORMING!*

Write today for catalog of bathroom cabinets and chrome accessories.

WORLD'S LARGEST BUILDERS OF BATHROOM CABINETS

THE F. H. LAWSON CO.
801 EVANS ST.
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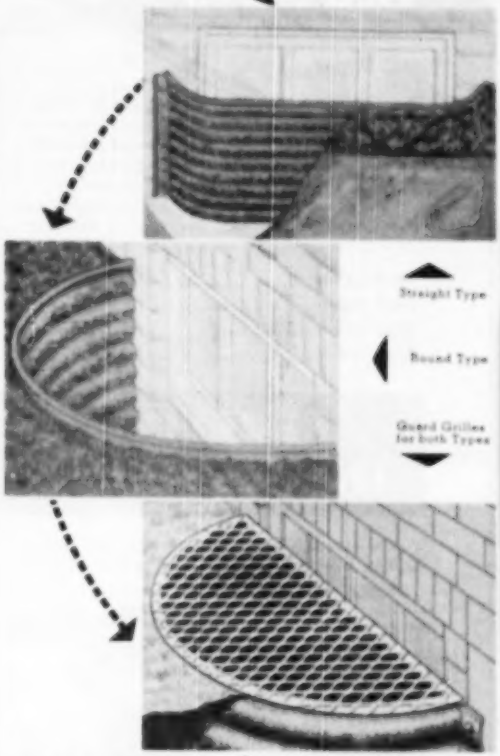
Lawson BATHROOM CABINETS

134 YEARS

The Practical Answer to *Low Cost* AREA WALLS



USF *Corrugated Steel* WINDOW WELLS *and Guards*

Sturdy, heavily bright galvanized, genuine USS Copper Steel assures lifetime service. Fast to install, low in initial cost and completely satisfactory on every application. Full range of sizes.

Heavy-duty, expanded metal guard grilles will carry heavy weight—admit plenty of light. At your dealer or write...

USF

USS STEEL

UNITED STEEL FABRICATORS, INC.
WOOSTER, OHIO

Long Handle CEMENTERS' TROWELS

Highest grade spring steel blade, tempered, ground and polished. Steel mounting; first quality ash handle 7 feet long, adjustable to any position; bolt and nut.

18x5 inches	$ 8.00
24x5 inches	9.00
30x5 inches	10.50
36x5 inches	12.50

LEVELING INSTRUMENTS

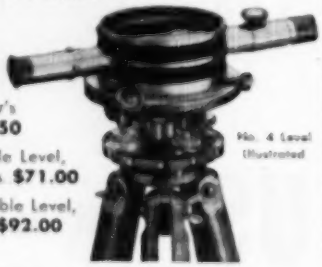
These levels are simple, accurate, durable and complete with 9 foot rod, target, plumb bob, carrying case and directions.

No. 2 Farm Level $34.00

No. 4 Contractor's Level $49.50

No. 5 Convertible Level, without Compass $71.00

No. 5C Convertible Level, with Compass $92.00



No. 4 Level Illustrated

Long Handle Trowels and Leveling Instruments shipped Express, transportation charges collect. Immediate delivery. Send money order or check with your order.

WRITE FOR FREE CATALOG

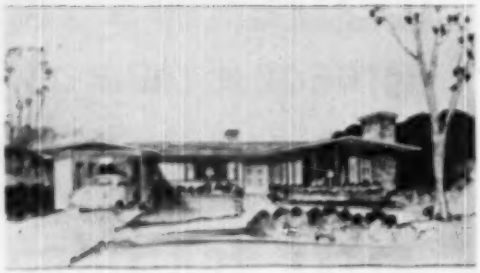
Send for 1950 illustrated catalog describing largest and most complete line of masonry tools for your trade, including steel mortar boxes and steel trestles.

Goldblatt Tool Co.

1912 Walnut Street Kansas City 8, Mo.

FIRST CHOICE OF THE TRADE FOR 65 YEARS

House Designed as Home Show Feature



HOME show house highlighted new ideas, materials, equipment

DESIGNED by John I. Mattson, Seattle architect, especially for the 1950 Seattle Home Show and Household Fair this house was built inside the Field Armory for the Seattle Master Builders Association by Lars Boyd and Harry Mahrenholz of Seattle. It was razed after the show was over.

In planning the house no thought was given to a design which could be built at any definite cost. Emphasis was on showing as many types of materials and equipment as possible while still retaining good design. A long lane of flowers and pools led from the auditorium's entrance to the front of the house.

An interesting feature is a small patio and garden at the rear, enclosed by a board fence and full of potted plants, offering privacy on a small city lot. All types of tile were used throughout the house. Philippine mahogany paneling combined with wall paper and copper-foiled-papered ceiling provided a living room with unusual appeal.

LANDSCAPING helps solve problem of privacy on small lot

Local Colorcretors Can Earn High Incomes

COLORCRETE is today's biggest business opportunity in the building field. High returns from a low investment. Easy, fascinating work. Large waiting market because Colorcrete is applied over all kinds of old and new masonry surfaces—exterior and interior.

Beautifies and Protects All Types of Buildings

Pneumatic pressure sprays plastic-like Colorcrete to give enduring beauty and water-resistant values. Range of 50 gleaming colors; many textures. Easy to wash. Smartly modern. Write or wire today for Opportunity Portfolio, which gives complete story.

COLORCRETE INDUSTRIES, INC.
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Second Edition

HOME BUILDERS MANUAL
For Contractors

This collection of material in its three-ring binder is designed as a selling kit. Any section may be removed and shown or given to the prospect. In the latter case a new section, punched for insertion, can be obtained. The user can add his own material, such as the local building code, to make it as complete as desired. The Manual contains . . .

- General advice for the user
- American Builder's Blueprint Plans book
- Portfolio of 14 8½ x 11 forms for estimating, job records and contract agreements
- Set of open Specifications for a house
- Complete set of Material List sheets
- Contractor's Bid and Budget Estimate forms
- Forms with carbon for "Extras"
- Small Job Estimator forms for repair jobs
- Home Owner's Property Records and Building Contract 1948. 2nd. 9½ x 11½, Fabrikoid binder, $5.00.
- Complete lists of House Plan, Carpentry and Estimating books.

Book Department

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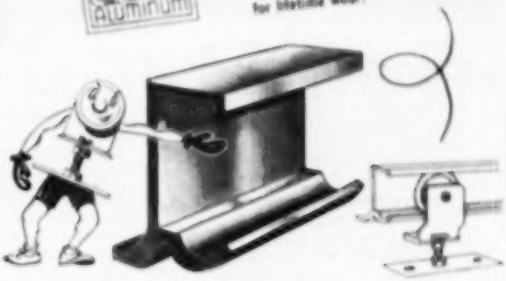
SIMMONS-BOARDMAN PUBLISHING CORPORATION
30 Church Street New York 7, N. Y.

HAR·VEY
ROLLING DOOR HARDWARE
-- made from the Quality Products of America's Leading Manufacturers

TRACK BY REYNOLDS

Produced by Reynolds Metals, the aluminum alloy extrusion used for the Har-Vey track is specially designed for smooth, silent rolling -- and specially processed for lifetime wear.



It's the nation's leaders giving their best that puts Har-Vey Hardware ahead of the rest!

It's leading concerns such as

THE CHRYSLER CORPORATION,
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-- all contributing the best of materials and workmanship as producers of component parts for Har-Vey Hardware --that makes Har-Vey first in its field for quality.

Yes, and it's advanced design that gives Har-Vey *engineering* leadership -- with new features that make it completely rustproof and assure positive locking -- with superlative ease of installation -- and with smooth, silent rolling that's sure to last for a lifetime.

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Check all the facts yourself! Send today for free folder giving full information on Har-Vey Hardware and varied uses of rolling doors -- with installation details.

Address: **Hardware Division O**

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Please send me your free folder on rolling doors & Har-Vey Hardware

NAME _____
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YOUR DEALER'S NAME _____

MULLER MIXER

HEAVY-DUTY HALF BAGGER *with*

Power Loader and Tank

THIS mixer gives the smaller contractor every production advantage found on larger mixers. Output is increased because high shoveling is eliminated. Automatic water measurement, rapid discharge, and Briggs & Stratton air-cooled engine insure perfect performance. Capacity 3½ cu. ft. mixed concrete, plus 10% overload.

Write for prices and specifications

MULLER MACHINERY CO., Inc.

750 Whitman Avenue

Metuchen, New Jersey

Tilters, Non-tilters, Plaster Mixers, Concrete Carts, Mortar Boxes

Letters

(Continued from page 33)

Mr. S. O. Dunn for the Publisher's Page. I can find nothing in any of these articles that indicates an anti-labor policy. What I do find in them is an anti-monopoly policy. The *American Builder* has always stood opposed to monopolies in any form by any class or group, regardless of whether the class or group happened to be production, distribution, contracting or labor. I can assure you that we have no anti-labor policy and that if you construe any of our editorials to reflect such a policy I would urge that you reread them. I am sure that you will find our argument not to be with labor, but rather with certain types of labor leaders who obviously are less interested in the welfare of labor than they are in promoting their own personal fortunes. We have attacked these labor leaders on the basis that what they are trying to do must in the end bring about economic conditions in this country which will hurt labor worse and earlier than it will hurt anyone else. We would do exactly the same thing if an individual or combination of manufacturers promoted policies which halted work, brought about crippling stoppages of production, and resulted in laying men off and starving their families. There is a very easily identified line between opposing labor and laboring men on the one hand, and opposing a type of leadership to which some of them are subjected.

I might say that I was especially surprised to hear your attitude since of all the organized labor groups in the country, relationship between *American Builder* and the United Brotherhood of Carpenters and Joiners is and always has been most cordial. Here in Chicago, where we are published, a number of us enjoy the personal friendship of many agents and top executives of the Brotherhood. I have never heard one of them express the slightest objection to any editorial or editorial policy of ours. I can assure you that we know them well enough, and that they know us well enough so that if there was anything which in their judgment was inimical to the welfare of the Brotherhood or of organized labor they certainly would tell us about it in a hurry.

We would indeed be very

(Continued on page 224)

Famous the world over for high efficiency!

Since 1903

JOHNSON

AUTOMATIC *Oil* BURNERS

For PRIVATE HOMES

For HOTELS HOSPITALS

For SCHOOLS CHURCHES

For PUBLIC BUILDINGS

For STORES FACTORIES

For nearly half a century, Johnson Burners have pioneered the way to better oil-heating. Today, their leadership is recognized by Heating Engineers the world over.

If you want more heat from less oil . . . if you want completely automatic operation . . . if you want to be sure of enduring, trouble-free service, install a modern Johnson Oil Burner.

There's a size and type designed for *every heating need* . . . large or small . . . steam, hot-water or hot air. As a first step toward heating satisfaction, look up your nearby Johnson dealer.

Johnson Oil Burners

S. T. JOHNSON CO.

940 ARLINGTON AVE.
OAKLAND 8, CALIF.

401 NO. BROAD ST.
PHILADELPHIA 8, PA.

CHELSEA FANS

FOR RESIDENTIAL AND COMMERCIAL NEEDS

— provide quiet, low-cost comfort cooling —

TWENTY-FOUR HOURS A DAY!

CHELSEA fans for home, store, shop, office, school, hospital, hotel, etc.—are guaranteed for efficiency and economy. Air delivery ratings of all CHELSEA products are determined by P.F.M.A. test methods — your assurance of plus performance!

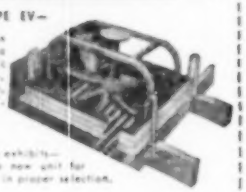
Package Unit, Comfort Cooler TYPE EH—

Chelsea spring-mounted, WALL TYPE package fan complete with springs and sash chain for rafter or ceiling mounting, canvas boot, and automatic outside louver. Simple to install, belt driven, exceptionally quiet. Sizes 24" to 60".

FEATURING CHELSEA'S EXCLUSIVE SPRING MOUNTING!

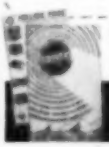
Package Unit, Comfort Cooler TYPE EV—

Designed for FLOOR MOUNTING in attics of low headroom, this Chelsea package unit is complete with automatic ceiling louver, brackets and springs, canvas boot, etc. Quiet in operation, economical to install. Sizes 24" to 48".



Attention HOUSING DEVELOPERS!

Special CHELSEA offer for model home exhibits—have our local representative describe new unit for large housing developments, and assist in proper selection.



WRITE FOR NEW CATALOG AND PRICE SHEET

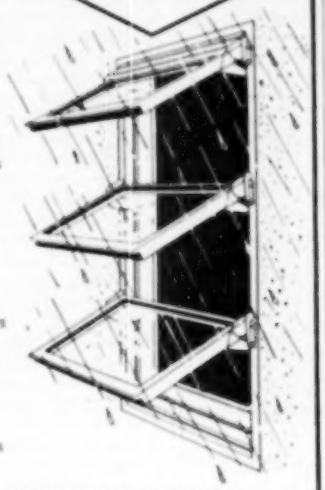
Full information on the most complete line for 50—engineering data, installation details, etc. Address Dept. K.

CHELSEA FAN & BLOWER CO., INC.

1706 GROVE ST., IRVINGTON, N. J.

ALWAYS RAIN-TIGHT HERE—

Head of top sash protects against rain even when window is open!



Well aware that dropping the top sash would allow rain to enter and ruin floors, furnishings and decoration, Gate City designed its awning windows with fixed hinges throughout.

This feature is one of the most important points to look for in the awning windows you specify or install. It symbolizes the careful attention Gate City gives to all requirements of service.

Add to this weathertightness the other Gate City advantages of easy weatherstripping, elimination of condensation, economy of maintenance, factory-applied toxic treatment—all proved by more than 10 years of satisfactory service on countless installations, and you have *many* important reasons why these beautiful windows are preferred by leading architects and builders all over the country.

SEE OUR CATALOG IN SWEET'S

For complete information about Gate City Awning Windows for homes and institutions, see our catalog in Sweet's, or write Gate City Sash & Door Co., Dept. AB-5, Fort Lauderdale, Florida.

Gate City

WOOD AWNING WINDOWS

Toxic-treated against rot—fungus—termites

Export Sales Representative: Frazar & Company, 50 Church St. New York 7, N. Y., U. S. A. Cable address: Frazar, N. Y.

why build WET... when DRY WALL CONSTRUCTION is safer, faster, less expensive?

If you have experienced the roar and damage of a falling ceiling—there is little we can tell you about Dry Wall Construction. Mr. Carl G. Lans, Technical Director of the NAHB says, "Before the war, everything was lath and plaster; now it is a rare thing in residential construction. Dry wall has proved satisfactory not only because it is much more economical, but also because it produces a true, straight wall . . . and eliminates the introduction of many gallons of moisture into the house."

For 32 years Homasote has been used for Dry Wall Construction—in millions of dollars of private homes.

Dry Wall Construction – with Homasote Big Sheets – offers many major advantages . . . The average wall is covered with a single sheet; batten strips and unsightly wall joints are eliminated. You get walls that are permanently crackproof, ideal for paper or paint, lending themselves to modern decorating effects, modern mouldings and trim . . . Let us send you performance data and illustrated literature on Homasote and allied products.

SEE OUR CATALOG IN SWEET'S

Weatherproof **HOMASOTE**

. . . in Big Sheets up to 8' x 14'

Oldest and strongest insulating and building board on the market

SEND FOR ILLUSTRATED LITERATURE

HOMASOTE COMPANY • DEPT. 43, Trenton 3, New Jersey

Send me literature on checked:

Standard Homasote (Big Sheets)	( )	Sete Asbestos Board	( )
Striated Homasote (Tiles and Panels)	( )	The Nova Roller Door	( )
Wood-textured Homasote (Panels)	( )	The Nova-Shingle and the Nova-Speed Shingling Clip	( )

Name.....

Address.....

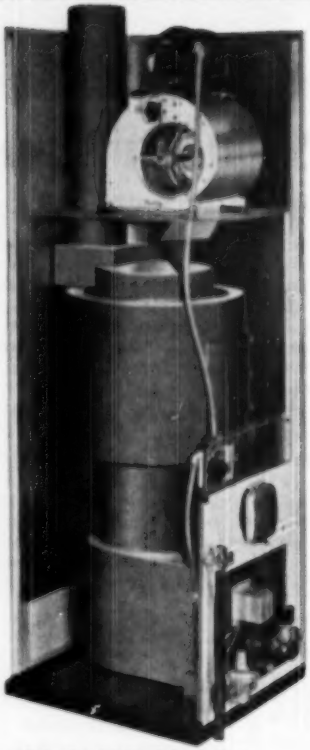
City & Zone..... State.....

CONCO heat

FOR UNDER-FLOOR-DUCT HEATING IN YOUR BASEMENTLESS HOMES

New "CONVERTIBUILT" COUNTER-FLOW HI-BOY

- DESIGNED FOR OIL OR GAS
- APPROVED FOR ZERO CLEARANCE
- MORE COMPACT — ONLY 22" x 22"



Gleaming white finish blends with other utility room appliances.

Cut-away view shows extreme compactness, full-size components.

It's All New . . . A FULL QUALITY AIR CONDITIONER

It's the new "RANCHIEF", the builder's own conditioner — built to your *specifications* to combine extreme compactness with full-scale performance. Measures only 22" x 22", is approved for zero clearance to combustible material. Top flue outlet, under-floor ducts, all controls are factory mounted. May be installed in utility room or closets, 23" x 50". Fully packaged, factory wired. Rated at 64,000 BTU at bonnet, either oil or gas-fired, fully approved for either fuel. Already the choice of leading builders. Write for full details.

"CONVERTIBUILT" FOR OIL OR GAS, OR OIL NOW, GAS LATER

OIL FIRED

(MODEL VC-1 OIL) Employs highly efficient vaporizing type stainless steel burner, with fuel-saving Blue Flame pilot.

(MODEL GC-1 GAS) Employs efficient, single port type Monoflame Gas Burner, manufactured under license from Ruberoid-Gordon.

GAS FIRED

CONCO ENGINEERING WORKS, DIVISION OF H. D. CONKEY & COMPANY • MENDOTA, ILLINOIS

Letters

(Continued from page 222)

foolish if we took an anti-labor attitude. There is an intelligent reason for understanding the problems of labor and of the sound, constructive unions such as your Brotherhood. That reason is that there will be no houses built in this country without skilled labor and no good construction done without the kind of screening and supervision exercised by your Brotherhood and similar unions. We pride ourselves on having enough intelligence to understand that. But even if that were not enough, there is a selfish reason. It is that a large number of our subscribers, both large and small builders, have been and still are members of the United Brotherhood of Carpenters and Joiners. It would be only human, even if we did disagree with it, which I assure you we do not, to refrain from attacking them, since their good will is worth much to us.

The action your Local Union took with regard to renewing subscriptions to the *American Builder* is of such concern to me that if on rereading the editorials I mentioned, you and the other members of the Union still feel that they are anti-labor, I wish you would take a few minutes to tell me wherein you can construe them to be so. If you would do that I shall consider it a favor and treat it accordingly.

"Curse of Monopoly"

Sir: Noticed your editorial titled "The Curse of Monopoly" in a recent issue of *American Builder*.

It is my belief that you used very good logic in preparing and presenting this material. You have hit upon many points which have previously been ignored by many political leaders.

I believe that men such as you do a great deal for the country by publishing the truth as you see it on such a controversial subject.

R. J. Waddington, Vice President
American Roof Truss Company
Chicago, Ill.

Publisher's Page

Sir: I am very interested in your "Publisher's Page" of the *American Builder*.

What this country needs is more men of the caliber and courage that Mr. Dunn displays on his page. This

(Continued on page 226)

That's the one I want to see!

NEW HOME FOR S
MOST LIVABLE: 2 bedr
2 baths. GULFSPRAY TUB
ENCLOSURES. Thermo
in large

Gulfspray

Shower Doors and Tub Enclosures

get buyers' attention

Extra sales appeal! Added beauty and convenience! Gulfspray Shower Doors and Tub Enclosures are money makers in "HOMES FOR SALE."

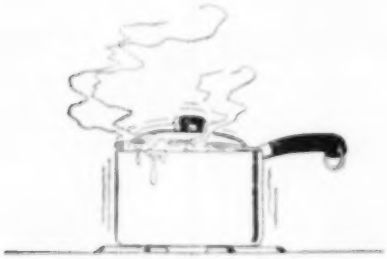
for full details write or call . . .

Binswanger + co.

207 N. Main
Houston, Texas

• 15 warehouses to serve you •

SUMTHUN'S COOKIN'!

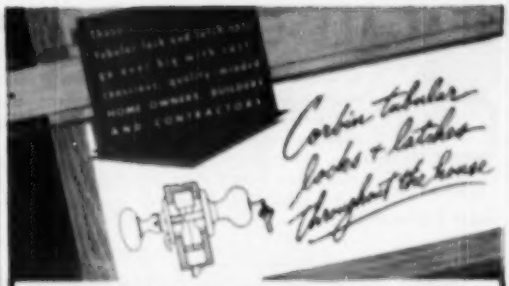


Watch for Big Kwikset Announcement
COMING SOON!

Look to Kwikset to be first and foremost with top quality residential locks.

Kwikset LOCKSETS

Kwikset Locks, Inc.
Anaheim, California



NOW A COMPLETE LINE of Budget-Priced QUALITY TUBULAR Locks and Latches...REVERSIBLE — for right and left-hand doors opening IN or OUT...

FOR EXTERIOR DOORS No. 330 Series
Operates by knob from either side and by key from outside when locked by inside lever.

BATH - BEDROOM SET No. 339
Privacy locking button, inside—with emergency entrance feature, outside.

INSIDE LATCH SET No. 340
Operates by knobs from either inside or outside.

STANDARD NIGHT LATCH FOR DOORS OPENING IN No. 646
Functions by key from outside and thumb knob from inside. Inside slide lever holds bolt retracted.

STANDARD NIGHT LATCH FOR DOORS OPENING OUT No. 646½
Operates same as No. 646 except that it features Auxiliary Latch protection.

DEAD LOCK No. 650
Operates by key from outside and turn knob inside.

- Distinctive finishes on enduring brass or bronze.
- Cast brass cylinder — 5-pin tumbler protection. May be MASTERKEYED if desired.
- Choice of attractive metal or glass knobs to match inside trim.

P. & F. Corbin
DIVISION
THE AMERICAN HARDWARE CORPORATION
New Britain, Connecticut

GOOD BUILDINGS DESERVE GOOD HARDWARE

CORBIN

SEAL-ALL CLIPS

Actual size of Seal-All Clip

A simple sturdy clip designed to interlock shingle sections and prevent raising of asphalt shingle tabs. The perfect clip for hexagonals, 3 in 1 strips and individuals laidup Dutch Lap method.

- **Made of solid copper wire—pliable yet strong enough to anchor single sections.**
- **Cannot rust out.**
- **Hammer is only tool necessary.**
- **Easy to handle.**
- **Beauty of roof unmarred.**
- **Perfect on repair jobs to correct leaky, unsightly roofs**
- **Millions in use since 1935.**

BUILDERS AND DEALERS! For complete information and free samples, write today.

SEAL-ALL CLIP COMPANY

BOX 3028 FLINT 1, MICH

Letters

(Continued from page 224)

one article is worth many, many times the subscription price. What he has to say has certainly set me to thinking—not only thinking but talking.

If you ever publish his "Publisher's Page" in book form please put me on the list—no matter what the cost.

Alonzo Boardman,
Augusta, Georgia

Convention Dailies

Sirs: Congratulations to you and the entire staff of hard working individuals who published the *American Builder* NAHB Convention Daily.

It is a very valuable, well-written, and interesting publication, inasmuch as it is impossible for an Association Executive to cover all the sessions and entertain the members from our own organizations at the same time it gives us the boiled-down highlights of the various happenings and sessions that would otherwise not be known about.

Probably not many of the convention delegates will take time to tell you how much they appreciate the paper. They like it for the simple reason that the NAHB Convention is so large it is impossible for anyone to know everything that is going on, and your paper keeps them informed. Two years ago one of our illustrious members asked if it would be possible to make up a daily for our State Convention like the *American Builder* put out at the NAHB Convention. He said, "That's a fine little paper and it would be nice if we could put out one like it."

None of the local executives probably have much contact with the fellow left at home while they are attending the Convention. Why not make it possible for them to mail home the copies of the papers that are left over each day or for that matter print a few extras for such a purpose. Not only would it promote the *American Builder* and the NAHB Convention, but it would bring up to the minute news to the fellows left at home and it might excite enough interest for a larger attendance the following year.

Congratulations again, on the excellent job the *American Builder* does for the building industry.

L. Tupes, Executive Secretary
Columbus Home Builders Association
Columbus, Ohio

Editor's Note: Thank you for the letter and the suggestion. We do print extras for distribution to those who do not attend.

(Continued on page 228)

For Architect Specification and Builder Installation . . .

ALL WALL-INSERT and WALL-SURFACE ATTACHABLE HEETAIRES

from 1000 to 6000 Watts are available with . . .

AUTOMATIC THERMOSTATIC HEAT CONTROLS

All HEETAIRES can produce and maintain any desired temperature between 55° and 85° F (with only a 2° differential at all times). This insures correct healthful comfort — uninterruptedly, quickly, wherever wanted.

"T" and "TA" Model Heetaires are equipped for automatic heat control—"T" with the thermostat built in, "TA" with built-in relay for operation with A-162 wall thermostat. These thermostats have a range of from 55° to 85° F. The "T" series are installed exactly like Heetaires without thermostats. All wiring has been built in at the factory.

Several "TA" Series heaters may be operated by one wall thermostat since each Series "TA" Heetaire has a self-contained relay for control by a single thermostat (with a range from 55° to 85° F.) if desired.

The "TA" series are easily installed by standard wiring methods—an advantage made possible by a special relay built into the "TA" Model Heetaires.

Tested and Listed Under Reexamination Service by Underwriters Laboratories, Inc.

"A Guide to Quick Heating"

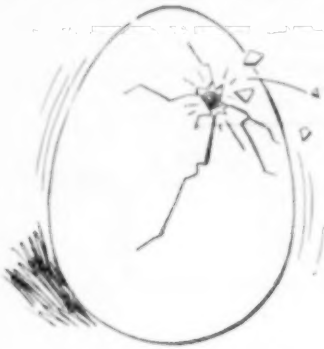
FREE!

Write for Bulletin W-5080 . . . all the data to help you choose the right HEETAIRE for every purpose.

MARKEL ELECTRIC PRODUCTS, Inc. — LA SALLE LIGHTING PRODUCTS, Inc.

151 SENECA ST. • BUFFALO 3, N. Y.

COMING SOON!



WATCH FOR BIG KWIKSET ANNOUNCEMENT!

Look to Kwikset to be first and foremost with top quality residential locks.

Kwikset LOCKSETS

Kwikset Locks, Inc.
Anaheim, California

All builders should know these facts about pressure-treated lumber

FIRST

PROTECTION—Treating of lumber preserves it—just as alloys preserve metals. The purpose is to protect lumber against costly rot and termite damage.

SECOND

PRESSURE TREATMENT vs. Surface Application—Authorities say that pressure treatment provides the only *sure, lasting* protection to lumber.

THIRD

OTHER QUALITIES TO LOOK FOR—For greatest usefulness, preservatives also should be *clean, odorless, paintable, non-leaching* and *non-corrosive*.

For complete information about WOLMANIZED Pressure-Treated Lumber, write for free booklet.*

*Reg. U. S. Pat. Off.

FOURTH

WOLMANIZED Pressure-Treated Lumber combines *all* these requirements—*lasts 3 to 5 times longer* than untreated wood, because it's treated under 150 lbs. pressure per square inch. Protection is deep in the wood fibers. It's clean, odorless, paintable, non-leaching, non-corrosive. Wolmanized Pressure-Treated Lumber has been proved in use for over 25 years. It will prove its value to your customers and boost your good reputation as a builder of sound, durable, trouble-free structures.

AMERICAN LUMBER & TREATING COMPANY

General Offices: 1660 McCormick Bldg., Chicago 4, Illinois

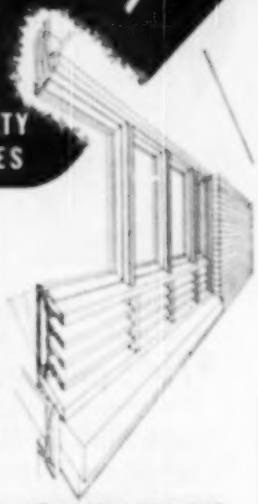
Branch Offices: Baltimore, Boston, Jacksonville, Fla., Little Rock, Ark., Los Angeles, New York, Portland, Ore., San Francisco

It pays to use... WOLMANIZED PRESSURE TREATED LUMBER

Now Ready

TO INSTALL

IN STOCK SIZES FOR A WIDE VARIETY OF WINDOW TYPES

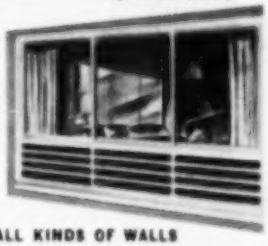


PRECISION-BUILT FOR DRAFTLESS VENTILATION

These new windows provide maximum visibility plus a minimum amount of infiltration or heat loss. They are suitable for all kinds of weather conditions . . . adaptable to almost any architectural specification . . . permit the use of narrow mullions and trim for more attractive exterior and interior appearance. Special sill construction, and stops used supply a snug job. No rain or snow can enter.

SOLAR AIR-FLO

ENGINEERED ALL-WEATHER *Windows*



Louvered sections are placed at top, bottom or sides of stationary window pane, according to design requirements. Baffle doors regulate circulation of fresh air, winter and summer. Screens concealed in *air-flo* section, removable from inside, for cleaning. Solar areas can be glazed with single, double or triple plate glass, according to climate.

INSTALLED IN ALL KINDS OF WALLS

Solar Air-Flo windows may be installed in any and all kinds of wall construction. The unit comes assembled and ready to place, complete with all exterior trim. No precision work or special tools are needed. Window frames and all sectional parts are precision-built of both treated wood and extruded aluminum, according to customer's requirements.

Solar Air-Flo windows can be used effectively in homes and commercial buildings, for building or remodeling. They combine beauty with utility. Learn more about these versatile units and their reasonable cost. Cash in on national advertising now appearing in leading magazines. Profit-wise dealers and builders will write NOW for specification data.

MAIL COUPON NOW!

SOLAR AIR-FLO, INC., Dept. 502, Elkhart, Indiana

Send me free descriptive literature on Solar Air-Flo windows.

I am ☐ Dealer ☐ Contractor ☐ Architect

Name _____ Firm _____

Address _____ Zone _____

City _____ State _____

"$86.28 per house
(13 sqs. asbestos shingles on gypsum)
$75.63 per house
(13 sqs. wood shingles on gypsum)
—that's what ES-NAILS saved me . . . good money in the bank!"
—says a prominent New Jersey builder.

In full, he stated: "I use ES-nails to attach both wood and asbestos shingles directly to gypsum sheathing—and they really do a job.

"ES-nails give better results than other types of construction . . . we are highly pleased with their locking ability—and use them exclusively."

Other practical reasons for using ES-nails include: their ease of application—no special tools are required, use a regular shingling hatchet or carpenter's hammer . . . they are self-locking, attaching wood or asbestos shingles directly to gypsum or insulation sheathing . . . and they can be driven at *any* convenient point—no need to locate studs.

For more information about the value of ES-nail construction—and the savings it will mean to you, call your supplier, or write: Elastic Stop Nut Corporation of America, 2330 Vauxhall Road, Union, New Jersey.

ES nail
A PRODUCT OF
Elastic Stop Nut Corporation of America

Available through Johns-Manville Sales Corp., National Gypsum Co., Weatherbest Corp., Creo-Dipt Co., Inc., Keasbey and Mattison Co., and American Stained Shingle Co.

CERTIGRADE SHINGLES

Approved by the Red Cedar Shingle Bureau, Seattle, Washington, representing manufacturers of Certigrade Shingles.

Letters

(Continued from page 226)

High Costs in Australia

Sir: This is to request you, if within your power, as a matter of urgency, to obtain and forward to me by airmail the general details, method of working, etc., and at a later date a summary of the legislation of the FHA Scheme.

In Australia we are finding that owing to the high cost of building construction, would-be home owners are finding it difficult to finance their requirements and the Lending Authorities are only prepared to lend approximately 75 per cent of the money required. Very little money is available for second mortgage owing to the pegging of interest rates.

Some (in Australia) have been advocating a government backing of risk -money similar to the FHA scheme and with a view to examining it in all its implications before submitting any proposals to the Commonwealth Government, I am seeking your aid . . . .

E. S. Elliott, Secretary
The Master Builders' Assn.,
Melbourne, Australia

Charter Subscriber

Sir: I am proud of the fact that I am a Charter subscriber of American Carpenter and Builder, and have nearly all the original numbers—including a bound copy of the first years.

W. H. Butler, Builder
Buffalo, Wyoming

Charter memberships to American Carpenter & Builder, forerunner of a publication which merged with American Builder, date back to 1905.

American Builder, 1872

Sir: Am passing on to you a page from "Appleton's Journal" of January 27, 1872, which may probably interest you. Have been reading the *American Builder* since 1885.

James M. Holm, Builder
Upper Darby, Pa.

In the January 27, 1872 issue of "Appleton's Journal" submitted by Mr. Holm, the American Builder had the following 1-inch advertisement on page 112:

"The American Builder: The only paper in the country devoted specially to the Building Arts. Terms, $3.00 a year, in advance. In consequence of the Great Fire, no more Specimen Copies can be sent free."

Amazing new General Chef cooking-refrigeration combinations are available in GAS-ELECTRIC models (illustrated above), or ALL-ELECTRIC (refrigerator—110 volt; stove—110 or 220 volt; oven—220 volt).

Also available—4 cu. ft. General refrigerator with Formica table top.

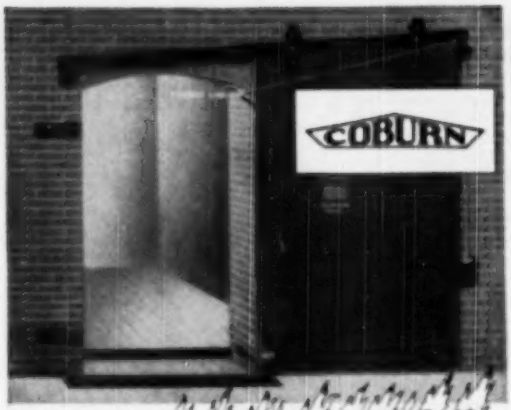
Builders of America's finest budget-priced refrigerators

GENERAL
air conditioning corporation
Los Angeles 23, Calif.
NATIONWIDE SALES & SERVICE

SAVE KITCHEN SPACE & DOLLARS
Send for data file today on GENERAL CHEF

General Air Conditioning Corporation
4542 E. Bunham St., Los Angeles 23, Calif.
Please send me your data file on General Chef cooking-refrigeration combinations. Include specification data on the complete line of General refrigerators.

NAME
ADDRESS
CITY ZONE STATE



FIRE PROTECTION

FOR YOUR PLANT AND PERSONNEL WITH COBURN FIRE DOOR HARDWARE

Increase fire protection by installing metal clad or Kalamine doors with Coburn Fire Door Hardware. Dependable, smooth-operating Coburn Fire Door Hardware will save valuable goods and protect personnel . . . and your fire insurance costs will be reduced.

Coburn Fire Door Hardware is made to specifications of The National Board of Fire Underwriters and, where necessary, bears the U.L.I. label. Special sets are available for single and double incline or level slide doors; vertically operated doors. All are equipped with automatic self-closing devices. Write for Catalog #210 showing the full line of Coburn Fire Door Hardware; charts showing required headroom; wall space and other vital information.

Engineering help is available without obligation.

Other Coburn Products include #500 Swing-Over Garage Door Hardware Sets, overhead trolleys and conveying systems for carrying loads up to 3,000 lbs.

COBURN PRODUCTS DEPARTMENT
THE COLORADO FUEL AND IRON CORP.
WICKWIRE SPENCER STEEL DIVISION

Executive Office — 500 Fifth Avenue, New York 18, N. Y.
Sales Engineering — 56 Sterling Street, Clinton, Mass.

CF&I

The COMET Senior

LONGER RETRACTABLE ARM

20% MORE CUTTING

GREATER SAFETY FACTORS

NEW RAISING-LOWERING DEVICE

Engineered for PROFIT

NEW LOW PRICES

Any Comet owner has Profit on his side! — at least in the cutting end of the business. Always built to make money for their owners, Comets rocket on to greater acceptance as number one radial power saws in the entire field. The recent new model Comets sparkle with exclusive improvements—and sell at a new low price. They make all the cuts necessary, from start to finish, outside and in. Thousands of owners say Comets short-cut to profit. Write direct, or see your nearest Comet dealer.

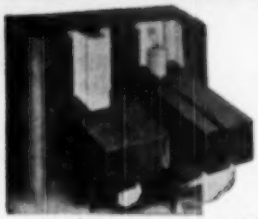
INCREASED WEATHER PROTECTION

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.
2029-33 Santa Fe Avenue, Los Angeles 21, California

COMETS cut quicker

The Milwaukee Combination

SASH BALANCE *and* WEATHERSTRIP



Available with or without bronze covers that completely hide spring, as shown above.

PERMITS REMOVAL OF SASH WEIGHTS, INSULATION OF MULLIONS.

Slash Labor Costs!

Simple installation allows one man to easily install 30 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost . . . higher profit!

Tops in Operation!

Smooth, positive action; accurate balance; finger-tip control plus the perfect seal against draft, dust, moisture. No wood-to-wood contact. Prevents sticking windows and window rattle.

EFFICIENT LOW COST — TESTED... APPROVED ACCEPTED! — FOR OLD OR NEW BUILDING

ATTENTION MILLS AND LUMBER YARDS

IDEAL FOR PRE-FIT WINDOWS

Can Also Be Sold in Single Unit Packages

Mail this coupon today!

Milwaukee Strip Service, Inc.
4621-23 W. Lisbon Ave.
Milwaukee 8, Wisconsin

Please rush me folder A-5 and price list of Milwaukee Combination Sash Balance Weatherstrip.

Name .....

Address .....

City ..... Zone ..... State .....

More Low-Priced Homes Going Up, Survey Shows

An appreciable increase in the construction of lower-priced homes is currently taking place, according to a report by the committee on trends and economic policies of the United States Savings and Loan League.

Two-thirds of savings association managers surveyed by the committee said that the lower-priced homes account for a "larger proportion" of total building than a year ago.

Other information indicated by the committee's survey of building and housing trends:

(1) There is little change in building costs from six months ago. Half the savings association managers polled said no change had occurred, while the remainder disclosed only slight variations up or down.

(2) The market has tightened considerably for both high and medium-cost homes, but the lower-cost new house is still in strong demand.

(3) Houses for sale are remaining on the market somewhat longer than was the case six months ago. This is particularly true in the high-priced new home category.

In commenting on the results of the survey, Henry A. Bubb, Topeka, Kas., president of the League, said "The buyer's market is back in earnest."

linoleum underlay drive screws

To make your linoleum underlays hold tightly and lay flat permanently, secure them with Hassall linoleum underlay drive screws. They are spiral-threaded and cement-coated for maximum holding power. Heads are flat countersunk type. Size: 1¼" x #3 ga. State quantity when writing for prices to:

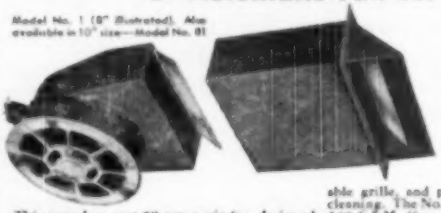
JOHN HASSALL, INC.
186 Clay Street
Brooklyn 22, N. Y.
Established 1850

H Hassall

SHEPLER RADIA ELECTRIC HEATERS and VENTILATING FANS

Here's a Completely New, Improved 8" Automatic Fan for Small Rooms

Model No. 1 (8" Illustrated). Also available in 10" size—Model No. 81



- Quickly installed in ceiling, wall or cabinet
- Designed for bathrooms, kitchenettes, powder rooms, etc.!
- Low in cost!

This new, low cost 8" automatic fan, designed specifically for small rooms of limited wall space, fits all standard construction and mounts horizontally or vertically. The powerful, quiet, totally-enclosed fan motor and 8" Torrington propeller assure long, trouble-free operation. Motor-blade assembly, attached to the removable grille, and plug-in connection simplifies cleaning. The No. 1 model has a rating of over 500 C.F.M. (free air delivery).

This type fan is also available in the standard No. 81 Model with 10" blades, having a rating of 650 C.F.M. (free air delivery). Both sizes feature double automatic shutters and weather-tight seal to prevent back drafts and sweating.

Approved by Underwriters' Laboratories

Everybody Profits with SHEPLER Preferred Products

RADIA

• Radia Electric Wall and Portable Heaters • 8" and 10" Automatic Wall and Chimney Fans • Automatic Wall and Ceiling Shutters • Gas and Electric Fireplace logs • Stationary and adjustable louvers.

Write Dept. AB-1 for complete details

SHEPLER *Manufacturing Company*

1312-14 SHEFFIELD STREET • PITTSBURGH 12, PA.

ATOMIC LAND INVITES YOU . .

MANUFACTURERS A NEW FRONTIER AWAITS YOU!

New Mexico is rich, young and ready for you! Your exhibit will reach a brand new market—fastest growing in the country today. Almost as many homes built in Albuquerque alone in 1949 as entire corporate limits of Chicago. It's not too late to reserve your space. If you have not already received a brochure on the show, wire for full information.

Sponsored by:

ALBUQUERQUE HOME BUILDERS ASSN.

1839 Campus Boulevard **Albuquerque, N.M.**

"JUST WAIT 'TIL YOU SEE IT!"

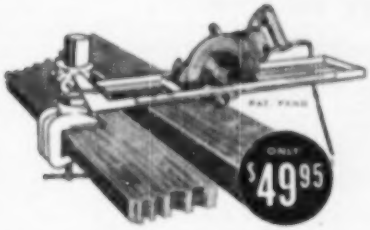
Watch for Big Kwikset Announcement COMING SOON!

Look to Kwikset to be first and foremost with top quality residential locks.

Kwikset LOCKSETS

Kwikset Locks, Inc.
Anaheim, California

NEW Capehart SAW GIDE



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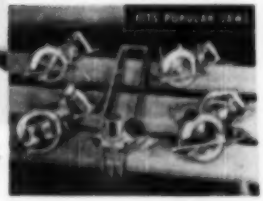

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Early 1950 Douglas Fir Production Below 1949

The production of Douglas fir lumber for the first quarter of 1950, despite heavy cutting during March, is 17 million feet below the output for the same period last year, according to H. V. Simpson, executive vice president of the West Coast Lumbermen's Association.

"We have not yet recovered from the crippling effects of the 'Paul Bunyan' winter of January and February," Simpson said. "Last year by this time, we had out 2,166,238,000 board feet. We will fall below 1948's record first quarter by 480 million feet.

"While some mills are still handicapped by lack of log supply," Simpson said, "the industry as a whole is pretty well back to normal operation." By the end of April most logging camps will have been opened, although late heavy snows have affected log supply in some areas."

The weekly average of West Coast lumber production in March was 205,817,000 board feet, or 126.3 per cent of the 1945–1949 average. Orders averaged 224,489,000 board feet, shipments to 18,105,000 board feet. Weekly averages for February were: production, 161,421,000 (99 per cent of the 1945–1949 average.) Orders were 201,507,000, shipments 189,361,000.

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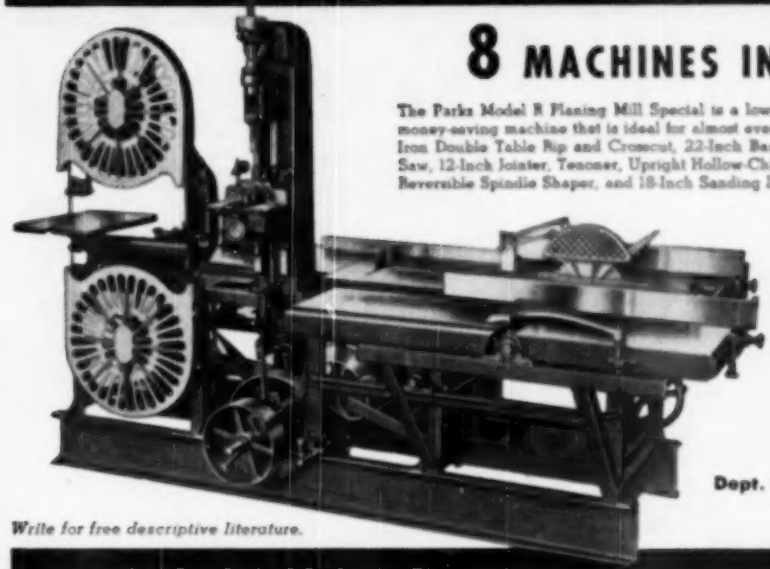

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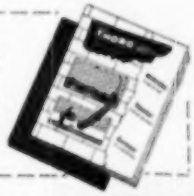

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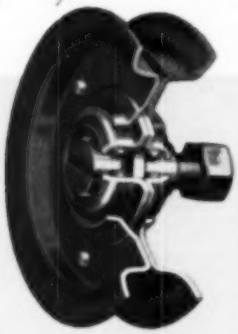

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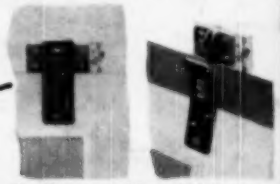

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